Operational Battle Command: Lessons for the Future

A Monograph
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ABSTRACT

OPERATIONAL BATTLE COMMAND LESSONS FOR THE FUTURE by MAJ Douglas J. Morrison, USA, 61 pages.

Future thinking, decisive decision-making, and leadership provide the foundation for the analysis of battle command in theory, doctrine, and history. Classical and modern military theorists make the commander the central point for leadership and vision. The art of command, leadership, and generalship have long been subject to review and scrutiny. This has taken on additional emphasis with the publication of U.S. Army Field Manual (FM) 100-5, Operations, in 1993. FM 100-5 presented a discussion of command and leadership which is the subject of numerous articles in professional journals and presentations by senior Army leaders.

This monograph provides a foundation for the discussion of battle command by first reviewing the theoretical underpinnings of command. Next follows a discussion of service, Army, and joint doctrine along with a discourse on U.S. Army doctrine since World War II. The examination covers the concepts of command in both the 1941 and 1949 versions of FM 100-5, Field Service Regulations: Operations. Finally, current doctrine is considered so that lessons can be drawn from the actions of successful operational commanders and applied to today's military.

Two operational commanders are scrutinized to understand how they developed, stated, and exercised operational battle command. This examination covers General George S. Patton Jr. and General Matthew B. Ridgway. Each commander provides a mechanism to compare theory and doctrine to the actions of operational commanders exercising battle command, with a goal of anticipating battlefield events, while setting the conditions for success. Both of these leaders exercised battle command in joint/combined operations, the type of warfare expected to be the norm for future military operations. In addition, General Ridgway endured political constraints which were unusual for the early 1950s, but today are part of the new rules for warfare. Finally, each of these officers exercised battle command through a strong individual personality which contributed to their successful leadership. These lessons are extremely important today, given a perceived lack of institutional training on exercising battle command.

This monograph concludes that operational assignments and self study will continue to provide the most useful means of training operational commanders. Further, that improvement is necessary at the War College level of instruction to address operational battle command. Without this educational component, the doctrinal aspect of battle command will wither and die.

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TABLE OF CONTENTS

I. INTRODUCTION

According to the U.S. Army's Field Manual (FM) 100-5, Operations, the operational level of war provides the linkage between strategic aims and tactical execution through the effects of formations. Operational Art is the sequencing of successive battles and operations, or tactical methods, into campaigns to attain major objectives or strategic aims.[1] Currently, FM 100-5, Operations, identifies several criteria for operational art, including: commander's vision; synchronization of events and resources to maximize potential; thinking and anticipating in depth; and the ability to achieve strategic aims through campaign design.[2]

Operational leaders must continually visualize the battlefield to attain strategic aims and objectives. Normally, the headquarters or command post (CP) is the focus of information flow and planning efforts to conduct simultaneous and successive operations through the synchronization of resources. However, a commander may encounter difficulty visualizing the battlefield and synchronizing efforts of subordinate units from a computer screen in the CP since the magnitude of information available to him is significant. Commanders must visualize or "see" the battle, analyze the situation, and take directive action to achieve and ensure victory. They must think and act simultaneously while visualizing the battle. This visualization of the battlefield is the essence of **Battle Command.**

The art of battle command embodies two key components: the ability to decide, or military decision-making, and the ability to lead -- leadership. Decision-making involves knowing if, when, and what to decide. Operational decisions involve anticipating events and comprehending the consequences of decisions in battle. The commander must understand the higher commander's intent. He must identify possible enemy courses of action, visualize the desired end state, and have a concept of his own operations while considering current and future operations concurrently. Once this is done, the commander then must clearly articulate his intent and communicate clear, concise orders to subordinates for execution.
Leadership, on the other hand, involves the personal side of command and develops according to the leader's individual style. It provides motivation and a sense of purpose for the unit. Further, it involves demonstrating both moral and physical courage in adversity. Leaders also provide the vision which focuses the unit and anticipates future actions.[3]

Battle command requires vision. Without vision, the commander is blind and his execution of battle command -- decision making and leadership, would be like two blind boxers. Each boxer attempts to find the other; when they do, each blindly tries to pummel the other into submission. No art here, just physical contact and possible defeat. The commander who can visualize the battlefield attempts, rather, to engage in a "chess match" with the enemy. Chess masters think not in one or two moves in advance, but rather eight or ten, with some continually playing out the game mentally. Chess experts consider everything in terms of action, reaction, and counter-action. While doing so, accomplished players remain focused on the ultimate objective or end state, that of checkmate.

The same is true with battle command. Vision provides the core from which the commander remains focused on the required operational end state. He maintains this vision of the battlefield -- action, enemy reaction, and counteraction; while leadership and command decisions fire the imagination and sustain the will to win. Vision provides a significant component for operational decision making, guided by intuition and feel gained from years of study and experience. The operational commander must have: the ability to anticipate; a careful understanding of the relationship between ways, means, and ends; an understanding of the inherent risks within decisions; and a focused application of resources to achieve victory. This constitutes his broad operational vision.[4]

Battle Command, as the name implies, is exercised by the leaders of military units. Commanders provide direction to their headquarters by assigning missions, prioritizing effort, assessing options, and motivating the organization. The staff, in return, assists and coordinates, thus facilitating the commander's span of control and ability to synchronize. This harmonious relationship provides the framework and foundation of **operational battle command.**

An examination of current U.S. Army and Joint service doctrine identifies how the military in general, and the U.S. Army in particular, develops battle command. This doctrine must be understood before assessing the effectiveness of operational commanders. A review of joint and sister service doctrine yields little in the way of discussion concerning operational battle command. The U.S. Marine Corps manuals on warfighting provide an authoritative foundation for the theory of war and how the Marine Corps prepares for combat. This doctrine includes broad concepts and guidance without dictating specific techniques or

procedures. Leadership at the operational level requires vision, strength of will, and moral courage; however, the Marine discussion focuses mainly on the commander as a component of a joint force, rather than as an operational commander who must exercise battle command. The Marine Air-Ground Task Force (MAGTF) is the focus of USMC doctrine and provides the means through which the Marine Corps conducts or contributes to an operational command.[5]

An examination of U.S. Navy doctrine is difficult at best. The Navy published in 1993 a White Paper entitled From The Sea, which addresses naval roles and contributions to joint operations.[6] Recently, the Navy activated a Doctrine Command to act as a proponent to categorize their operations. In March 1994, Naval Doctrine Publication (NDP) 1, Naval Warfare, was published to provide a framework for "detailed Navy and Marine Corps doctrine".[7] Further, it serves as a bridge between naval strategy and tactics and techniques. These documents will help the Navy to catch up with the progress and innovative ideas advanced by the other services, notably the Army and Marine Corps. In this context, From the Sea attempted to define the U.S. Navy in terms of roles and missions, not doctrine. In fact the White Paper was termed "a new direction for the Naval Service", further, "a combined vision".[8] NDP 1, Naval Warfare, seeks to translate the strategy and focus of the White Paper into a doctrinal foundation. The documents contain no discussion on training, developing, or exercising battle command.[9]

The Basic Aerospace Doctrine of the United States Air Force, Volumes I and II, focus primarily on the theory of war, the nature of aerospace power, and the application of that power. Aerospace doctrine simply is the lessons developed since the beginning of powered flight, combined with certain precepts of air power. It serves as a guide rather than a rule book for the preparation and employment of aerospace power. Specifically, it is written for use by the practitioners of air power. The concept of battle command is not referenced or mentioned.[10]

U.S. Army Field Manual (FM) 100-5, Operations defines battle command, and FM 22-103, Leadership and Command at Senior Levels, discusses how the commander develops a vision for his unit. In this context, FM 100-5 serves as the doctrinal foundation for the discussion of battle command. The relevance of this discourse on operational battle command

results from the Army's 1993 publication of FM 100-5. This manual has had a dramatic impact on how the Army thinks about warfighting. Further, recent articles in professional publications have addressed the future of war and how joint forces (U.S. Army and other services) must deal with improved technology and increased weapons lethality.[11] Part of this discussion has focused on the art of command in an environment which includes real-time situational awareness, digitization, organizations which are electronically linked, friction and chaos which the Army seeks to harness as an advantage. The operational commander must be able to function within this command-centered environment, synchronizing resources and weapons effects rather than units.

Joint Publication 3-0. Doctrine for Joint Operations, follows U.S. Army doctrine closely, but does not specifically mention battle command. Primarily, the focus is on command and operational art. To exercise operational art, the commander must resource the tactical fight, provide a vision to the force, and anticipate future requirements and events. Command involves the art of motivating and directing forces to accomplish the mission. The connection to operational art occurs as the leader visualizes the current enemy and friendly situations, discerns opportunities, and conceives the future end state which will accomplish the mission. Control is inherent within command. Staffs provide the control mechanism which allows the commander the freedom to operate, delegate, synchronize resources over time-space through different dimensions, and position himself to lead. Staffs work to facilitate the commander's intent while directing and allocating resources.[12]

Historical Evolution of Command

A discussion of battle command at the operational level of war must also include a definition of an operational commander. According to Joint Publication 1-02, Department of Defense Dictionary of Military and Associated Terms, "it includes the authority and responsibility for effectively using available resources and for planning, directing, coordinating, and controlling military forces for the accomplishment of assigned missions."[13] Operational command would occur at the level at which campaigns and major operations are planned, conducted, and sustained; while linking tactics and strategy through the establishment of operational objectives.[14]

Fundamentally, this current perspective of battle command has as its roots a historical evolution of command. The famous French Emperor Napoleon Bonaparte's operational vision focused on the decisive battle of annihilation. The battle he sought would bring about the destruction of the enemy's army, altering the strategic situation in France's favor. His personal style of command allowed his armies to march dispersed and fight concentrated. Due to the technological limitations of weapons systems, he synchronized units to achieve mass at a single decisive point more quickly than the enemy. This allowed Napoleon to achieve operational objectives, thereby linking tactics with strategy.[15]

Napoleon visualized the employment of divisions arrayed in corps organizations which conducted independent movement. These operationally durable forces were arranged to march and then concentrate at a single point. Napoleon's personal presence on the battlefield allowed him to direct these converging forces at the proper time to concentrate for battle.[16] He actively searched for information, visited forward units, and supervised the execution of orders. His ability to "physically see" the battlefield was enhanced by the use of "directed telescopes" (adjutants general) who moved throughout the army collecting information and serving a variety of functions, from conducting reconnaissance to commanding a reserve of cavalry.[17]

To make this decentralized command function, Napoleon used: the independent corps system; mission oriented focus for units; a regular reporting system for units to his headquarters; a headquarters staff capable of handling reports and orders; and the directed telescope system to keep the commander from becoming a prisoner of the command post and staff. Above all Napoleon was a "genius", able to determine what could be done with the means available, to avoid what was not possible, and to distinguish between the two.[18]

In the forty-six years between Napoleon's defeat at Waterloo and the American Civil War, the Industrial Revolution and mass armies brought about an expansion of the battlefield. Smokeless powder, rifled muskets, fortifications, the continuous mobilization of large armies, railroads to shuttle troops and supplies, telegraphs facilitating near instantaneous communications, and rifled artillery each led to an increasingly distributed battlefield. This mass of forces and improved weapons effects led to increased dispersion of forces. The use of tactical fortifications increased in order to provide protection against the increased lethality of rifled infantry and artillery weapons. This slowed the tempo of attack, but increased the space

and duration of battle. The operational commander had to coordinate in time and space, as well as conduct diverse, simultaneous and successive operations with his forces. Command was facilitated by technological advances such as the telegraph and the growth of staffs to assist in the control of operations.[19]

General Ulysses S. Grant's method of battle command focused on pressuring the armies of the Confederacy without pause, achieving victory through both exhaustion and attrition. With this expansion of the battlefield, commanders were required to process information more rapidly in order to render a timely decision. Grant had to maintain a vision while making sweeping maneuvers and then engaging in battle. He had minutes or hours to make decisions and formulate plans, whereas Napoleon had days or weeks. Further, these multiple deep maneuvers and distributed operations were envisioned as contributing to an overall goal. This freedom of action enabled maneuver against the enemy to put him in an untenable position. This positional advantage based on a common plan, converging at a single center point would bring an end to the war.[20]

The operational forces of General Grant were demobilized and disassembled after the war. The United States would not field a corps formation again until the Spanish-American War in 1898; nor a field army formation until the American Expeditionary Force (AEF) of 1917. Not until World War II would large maneuvers of field armies occur requiring operational battle command.[21]

The development of the airplane, mechanization, space systems, instantaneous communications and the media (TV), along with nuclear weapons and improved chemical weapons, have increased immeasurably the pressures and demands on the commander to make timely, accurate decisions. In today's context of instantaneous communication and digitization, the decision time is in seconds. In joint/combined operations, the commander can no longer physically view all forces dispersed on the battlefield. He must have a vision of the entire expanded battlefield, anticipating rather than reacting to events. The evolution of command then is as complex as the art of war itself.

Future thinking and leadership provide the foundation for the analysis of battle command in theory, doctrine, and history. This monograph provides a foundation for the analysis of battle command by first reviewing the theoretical underpinnings of command. Next

follows a discussion of U.S Army doctrine since World War II, examining the concepts of command in both the 1941 and 1949 versions of FM 100-5, Field Service Regulations: Operations. Finally, current doctrine is considered so that lessons can be drawn from the actions of successful operational commanders and applied to today's military.

Two operational commanders will be scrutinized to understand how they developed, stated, and exercised operational battle command. This examination covers General George Patton's actions during the Third U.S. Army (TUSA) Saar-Ardennes campaign in November 1944-January 1945, and General Matthew Ridgway and Eighth Army/United Nations Command Korea (EUSA /UNC) during the Korean War, 1950-51.

Each commander provides a mechanism to compare theory and doctrine to the actions of operational commanders exercising battle command, with a goal of anticipating battlefield events, while setting the conditions for success. Both of these leaders exercised battle command in joint/combined operations, the type of warfare expected to be the norm for future military operations. In addition, General Ridgway endured political constraints which were unusual for the early 1950's, but today are part of the new rules for warfare. Finally, each of these officers exercised battle command through a strong individual personality which contributed to their successful leadership. These lessons are extremely important today, given a perceived lack of institutional training on exercising battle command.

II. ANALYSIS OF BATTLE COMMAND

Classical and modern military theorists make the commander the central point for leadership and vision. The art of command, leadership, and generalship have long been subject to review and scrutiny. Thucydides, in the History of the Peloponnesian War, frequently addressed the decisions and battlefield actions of commanders and the impact of those decisions on the battlefield.[22] Caesar's The Gallic Wars deals almost entirely with command and how his personal decisions influenced both friendly and enemy forces.[23] Grant's Personal Memoirs provide a lucid discussion of leadership amid the din, confusion, and destruction of battle.[24] Although centuries apart and with different formats, common ground among these greatly spaced in time historical examples does exist. Classical and modern theorists explore command and leadership in much the same way. Their foundation for discussion includes certain traits, skills or knowledge, and responsibilities of leadership for command.

The Chinese general Sun Tzu, who wrote around 500 B.C., provides a rational basis for the planning and conduct of military operations including generalship.[25] The theoretical basis for battle command and vision, according to Sun Tzu, concerns the qualities of moral strength and wisdom of the commander.[26] Through knowledge and wisdom the commander understands the strengths and weaknesses of friendly and enemy forces. Further, he can visualize or "see' the battlefield -- terrain, action, and enemy reactions. The general then creates opportunities and decisively takes advantage of them. While accepting risk, he never needlessly puts the force in danger. Moreover, the general is ever mindful of the enemy -- who always has an option. Therefore, the general must be flexible and be ready to adapt to existing situations, never missing the opportunity to maintain the initiative and overcome the enemy.[27]

Many theorists who followed Sun Tzu emphasized the same qualities of moral courage and intellectual strength. Carl von Clausewitz and Baron Antoine Henri Jomini, two nineteenth-century theorists, comment a great deal on the character and qualities required of the commander.[28] Clausewitz addressed moral and physical courage and the need for a strong intellect to penetrate the unforseen of war. Clausewitz contended that military genius required courage.[29] He viewed this courage as including the physical dangers of war as well as the moral element of command. The commander must not only make decisions in time of crises, but also accept responsibility and stand by them with a steady nerve in face of adversity.[30] This steadiness of purpose results from a strong character which will not become unbalanced by the most powerful emotions or the most trying circumstances. Further, this energy, firmness, staunchness of purpose, and emotional balance of character, leads to a strength of will. Determination aroused by intellect provides the foundation for courage to face the unexpected and follow his vision of battle. Moreover, this determination, along with the commander's intuitive feel for the battlefield, allows the leader to "envision, even in the darkest hour, what will lead to success" and then to pursue it to victory.[31]

Jomini made his observations concerning command in war based on his experiences in the Napoleonic Wars of the early 1800's. He contended physical and moral courage were of paramount importance. Moral courage was derived from tactical proficiency and through knowledge of the basic principles of the art of war. Without courage and determination the

commander could not motivate the masses of the army to achieve difficult objectives or endure the hardship of battle.[32]

Imagination and anticipation are other characteristics which assist the commander in developing a vision of the battlefield and executing battle command by seeing and influencing operations. Experience supports the imagination, as does an inquiring mind. The creativity must remain controlled -- steadiness of purpose, or every situation report of enemy action would cause indecision and panic. The commander's power of intellect and breadth of experience assist in controlling the vision and allow him to foresee events on the battlefield by penetrating the fog of war. Further, as the operation develops, these events can be used to fill information voids and to further visualize future events. Thus, the commander can create opportunities and take advantage of them rapidly. Bold, accurate, and astute decisions provide the impetus for action to achieve these decisive results.[33]

Friction inherent on the battlefield includes the effects of weather, technology, and the actions of men. Weather may impede communications and slow unit movement. Hesitancy and impulsiveness are the enemies of resolute and well reasoned decisions. Hesitancy may lead to opportunities missed, while rash decisions may lead to actions when there is little cause for action. The commander's determination and vision may be further clouded by battle losses to friendly or enemy forces. In the age of near instantaneous communication, a commander may break off action or hesitate slightly in reaction to casualty reports, thereby causing a unit to fail due to information overload.[34] Uncontrolled actions may result in unsound decisions or panic.

The operational commander will have many qualities which contribute to the success of his leadership. He must have staunchness and resoluteness of purpose, while not being inflexible. His intellectual ability contributes to this strength of will, allowing him to visualize the battlefield while anticipating the unexpected. Further, he must have the ability to remain above the chaos of battle and stay focused upon the mission and ultimate end state. Distraction due to short term success or failure may well cause failure to achieve the final objective. Moreover, the commander needs a trained and disciplined mind. Without this capability, uncontrolled action and impetuous decisions may result. With these attributes, the commander can see and influence the battle thus executing battle command effectively.

Having these traits though, is but a part of successfully exercising operational battle command as an operational commander. The commander must understand the spatial temporal influences of terrain, including weather. He must understand tactical actions on the battlefield; enemy and friendly capabilities and weaknesses. An understanding of these factors provides the foundation for victory.[35]

Understanding terrain or one's **Battle Space** involves distance, time, and the impact of weather. Battle space includes the breadth, depth, and height in which the operational commander positions and moves resources over time. The concept also embodies the concept of commanders expanding their vision for controlling the enemy and protecting the friendly force before mental limitations are applied.[36] Distance includes not only the space between two points, but an understanding of the impact the ground has on the force-size, disposition, and type of force the terrain can accommodate. Further, time is influenced not just in hours and minutes, but also how changes in terrain will affect the movement of the force. Icy roads may slow mechanized traffic, yet cross-country mobility may be enhanced with the ground frozen solid. Moreover, an understanding of battle space allows the operational commander to visualize the force and how it will move, arrive, and fight the battle. Experience remains the most significant contributor to this ability. Understanding the interrelationship of these factors in the battle space allows the commander to know what is possible and what is not.[37]

The operational commander develops a further understanding of what can or cannot be achieved from experience and knowledge of battle at the end of the bayonet. Black arrows drawn on maps pointing to circles denoting objectives to be seized require men to execute tactical actions against the enemy. Soldiers and units cannot be moved on the ground as easily as blocks on a map board. Friction of battle and the conditions of the battle space make actions imperfect. If a commander has never experienced war, he may not understand the difficulties which exist. From the outside all looks so simple, the options are clear. As General Lucian K. Truscott, a renowned World War II combat commander stated, "One must actually experience the hardships of war to understand the awful strain, both mental and physical, which battle imposes upon men; the dreadful fatigue and fear which destroys the will and poisons every fiber."[38] Friction then is what sets real war apart from war on paper. An army is composed of people, they like the parts in a machine, contain the potential for friction.

The good commander must understand friction to overcome it. Further, it allows him to know what is possible on the battlefield.[39]

War also involves certain moral factors. Clausewitz termed them as, "the skill of the commander, the experience and courage of the troops, and their patriotic spirit".[40] These principal elements must be understood by the commander as he builds teamwork among his units, exercises the skill of battle command, instills discipline, and focuses the training of the force for battle. More importantly, he must understand the lot of the simple soldier, the risks inherent in combat, and the cost of poor decision making on the part of the commander.[41]

Identification of risk may highlight an opening or an advantage for the commander to use. Excessive risk may outweigh the taking of a particular objective or the success of given mission. Opportunity at the tactical level must be synchronized with operational functions to ensure it has the desired result at all the levels of war (tactical, operational, strategic). If tactical risks do not outweigh the operational advantage, then no option exists for exploitation.[42] The essence of this understanding is the synchronization of friendly units and the desynchronization of the enemy. In this manner the commander not only views the possible, but he confirms or denies the current course of action while contemplating future decisions and actions. The commander uses his intellectual powers and intuitive feel to filter right from wrong and then acting decisively.[43]

Doubt remains the ever present enemy of the operational commander. To counter this doubt, the operational commander must truly be a "general". The commander must grasp not only the tactical and technical capabilities of his own branch or service, but also maneuver operations, fire support, mobility and survivability, aviation, combat support, and combat service support. He must additionally know what capabilities the other services, such as the Marines or Air Force, bring to the campaign. In today's combined environment, he must also comprehend any allied nations placed under his command, not just militarily, but also politically and culturally. This understanding further contributes to reducing doubt and allowing the commander to determine what is possible or impossible on the battlefield.[44] The operational commander can then conceptualize and visualize the operation while synchronizing weapons effects and unit capabilities.

The expertise of the commander and staff allow use of intuition, an instinctive ability to solve problems.[45] Born from experience, this seasoned judgement rapidly dismisses the impractical and moves on to the more feasible.[46] The commander uses creativity and intuition to visualize current and future operations. As he moves around the battlefield"seeing and sensing the battle," the commander interacts with his subordinates and staff. The staffs in turn work within the commander's intent and vision to assist in providing the direction, supervision, and control of units; allocating resources through plans and orders; and providing critical information to the commander. The commander then visualizes adjustments that may be required and decides on the activities over time and space which need to occur in order stay focused on the objective.[47] Communications technology provides a means for the commander to better "see" and influence the battle. The commander must comprehend the advantages which this capability can provide as he attempts to synchronize his forces.

In this age of instantaneous communications, technology provides assistance to the commander. Communications assets provide a means to bring order through timely and accurate information, intelligence, and contact with subordinates and superiors. General of the Army Omar Bradley once said, "Congress can make a General, but only communications can make him a commander."[48] Communications and technology allow the commander to rapidly access information and synthesize data so that time and opportunity are not lost. While technology provides a means to access information, the commander must still have the mental agility to deal with the uncertainty of war. Despite the advantages of technology, if the commander cannot keep pace with the battle or must depend on laborious staff work, he may not quickly or accurately visualize the battlefield. As long as operations continue as previously planned, options will present themselves. However, when the unexpected is encountered, the initiative may be lost and the commander may only react to enemy action.

Leaders have a responsibility to provide emotional balance to the force since war is a test of conflicting wills.[49] The commander must maintain his composure, which leads to a strengthening of will. The commander demonstrates this resolve in time of confusion or ambiguity. In these instances, the commander must bring order from chaos by making rapid, accurate decisions. Simultaneous and successive operations do not always allow the commander to be present at every decisive point or to make every decision. He must be positioned where

where he can best influence the action. He does not remain at his CP, but moves about the battlefield looking soldiers in the eye, getting a feel for the battlefield and the true abilities of subordinate units. If the commander shirks his responsibility or hesitates in the face of danger and adversity, the unit may also waver. A situation then exists where the initiative maybe lost, opportunities missed, and operations may fail.[50] This is the essence of the personal part of leadership and battle command.

Operational situations do not always permit neat or tidy solutions. The commander is often faced with uncertainty, numerous conflicting options, and many courses of action for which he may or may not be able to defer action. The commander requires the best possible information on how he should proceed. This is normally accomplished with a process called the commander's estimate. A part of this process involves the estimates the which staff produce and provide to the commander. The second portion involves the personal appraisal of the commander. It involves not only an appreciation of the situation during deliberate planning, but also a continuous review of what the commander considers all circumstances affecting the military situation.

Commander's Estimate

Commander's conduct an evaluation of the situation in order to make rapid, accurate decisions. This estimate involves a basic visualization of the friendly and enemy situations. Further, it may examine a particular course of action in anticipation of possible events, with a clear expression of alternatives.[51] Evaluation includes enemy and friendly capabilities and limitations; influences of terrain; planned objectives; and the possible requirements for subsequent operations. The operational commander evaluates each situation in the context of his overall vision for the entire operation or campaign. His synchronization of assets over time and space through different dimensions focuses on the "shock, disrupt[ion], and defeat" of the enemy.[52]

The commander's estimate, before and during battle, provides the foundation for successful operations and a point of departure to deal with unexpected events. While war is in the realm of uncertainty, commanders must strive to penetrate the unknown and identify critical information accurately. Though the staff may assist in preparing a clear picture of the

battlefield, the commander has the responsibility to apply the information when making decisions which influence the outcome. Collected data is balanced against the commander's previous estimate of the situation and what he deems possible based on intuition. Using professional judgement, the commander then attempts to develop an accurate view of the circumstances and how they can be developed by taking advantage of available opportunities and options.[53] Above all, this remains the responsibility of the commander. If delegated to the staff, then he yields the responsibilities of command.

The foundation for the commander to make this estimate, and later extrapolation, is experience. He gains experience from continuous study of the profession, experience in combat, and/or rigorous and challenging training. Intellectually, the commander synthesizes information and lessons learned to be used later in the heat of battle. By organizing this knowledge the commander may apply it to a specific situation or crises in the future. An intellect which works like a computer is not required. Rather, the commander must be dedicated to the study of the profession of arms, and by doing so, he creates the conditions for broad experience in the art of war. Thus, the commander develops not only himself, but those around him with an attitude that something new can continually be learned about the profession.

In order for the estimate to be valid, the commander must first define the problem. Without firm reasoning, guesses and inferences may result which can cause confusion. This can influence the staff and subordinate units to lose focus and veer from the projected end state, thus operating outside the commander's established operational vision. Should the vision become clouded and poorly focused, battle command becomes more difficult, if not impossible. Clearly, it is the commander's responsibility to identify the situation and critical information based on his experience and knowledge. The staff assists in the process by supplying additional information and facts bearing on the problem so the commander can begin to develop a solution.

The estimate should always be forward looking, anticipating problems which require a solution or action. While a formal, written estimate may be produced prior to battle, once the action begins the commander conducts a continuous mental estimate. This endless, predictive process weighs inputs and events, while staying focused on the objective and the options available to accomplish the mission.[54] By always maintaining his vision, the

operational commander exercises battle command in such a manner as to allow his subordinates the greatest latitude to conduct their own operations. Further, his anticipation of future problems, while providing the means to deal with them, allows subordinates to remain focused on the required mission.[55]

The operational commander maintains focus by providing a clear vision and intent for the subordinate tactical headquarters. They are presented this through mission statements and specified tasks, boundaries, objectives, and the allocation of resources. While the operational commander provides the means or formations to achieve the desired end state, he leaves the tactical details or creative employment to his commanders.[56] The effect is that engagements and battles are won by the tactical employment of weapons systems. The operational commander, just as the chess master, is focused on the opposing operational commander. By presenting his opponent with a situation which means defeat (checkmate), then that commander's vision has been destroyed or interrupted since no opportunity remains. Furthermore, that enemy commander must "see" or visualize that defeat, for as long as options exist, he should continue to struggle.

Lieutenant General John C. Pemberton, the Confederate commander during the Vicksburg campaign, provides an example of this. Pemberton seemed confused, and at times overwhelmed, by General Grant's actions during the ten month campaign. Operational diversions such as Grierson's raid to Newton Station and Baton Rouge, then Sherman's deception operations diverted Pemberton's focus. Further, initial tactical successes by Confederate forces provided Pemberton a weak foundation from which to base decisions later in the campaign. He focused on a passive, reactionary campaign which gave the initiative to General Grant. With General Grant's victories at Champion Hill and Big Black Bayou, two key battles of the campaign, Pemberton's vision became incoherent and blurred. Despite subsequent tactical successes around the seige works at Vicksburg, Pemberton's moral courage and resolve were so badly shaken that defeat and surrender were inevitable.[57]

Theoretically, operational commanders must have certain traits, skills, and assume specific responsibilities to develop, exercise, and maintain operational battle command. The commander focuses on critical decisions which require his action. His staff exercises

authority over normal or routine actions. He must exhibit moral courage to lead and make decisions which may involve danger and death for subordinates. Further, leadership involves taking responsibility for those decisions. Battle command also requires technical skill in understanding enemy and friendly capabilities. Moreover, he must understand the time and space relationships along with the influence of terrain upon possible courses of action. This allows him to determine what lays within the realm of the possible on the battlefield. Finally, the commander applies these skills and qualities commensurate with his vision for the campaign, to insure the final objective is reached and victory achieved.

Influence of Technology: The Element of Control

The concept of battle command embodies controlling subordinate forces and providing information to the next higher commander. Part of the friction of war involves the communication between those commanders and subordinates. The problem is not new, but has grown significantly over time. Failure to communicate can cause disaster. The increasing demands of the modern battlefield have caused communications systems to grow in sophistication. Since the semaphore telegraph of Napoleon's day, many innovations have been instituted which have enhanced control of forces. The telegraph, wireless, radio, satellite communications, through today's "digitization" of the battlefield, information reported to the commander has expanded significantly. This information "explosion" has helped commanders pierce the fog of war, while also adding friction to the system of command. Despite these innovations, command remains a human exercise. Technology has changed the command process, but not the principles and the essence of command. Therefore, technology must be briefly analyzed as it applies to battle command.

These demands on the command system result from the speed and precision, complexity and increased mobility, and dispersion of modern forces. Coordination and control have grown both in importance and in difficulty. Modern weapon systems have decreased the time available for accurate decision making and coordination. What took hours or days to initiate now may take only minutes. While this temporal reduction continues, the information loop continues to grow in size and increase in the volume of information passed.

Communications and data processing advances have effected both the methods of command and how such devices are employed. Orders and graphics which contribute to the

decision making process can now be faxed over tactical communications systems. Command posts contain satellite communications equipment, computers, radios, telephones, fax machines, and a host of automated devices. The end result is that, given the complexity of today's forces and the multiple missions which must be performed, overall coordination and control becomes crucial. Command becomes the critical link in the effective distribution of resources which allows quick, clear assessments of the situation and timely, accurate decisions.[58]

Command cannot become an end unto itself. Limitations and influence of technology must be understood, from satellite positioning for the global positioning systems (GPS) and satellite communications (SATCOM), to limited data transmission rates for tactical faxes. The commander must utilize the technology to his advantage while compensating for shortcomings with other means, including liaison officers and forward command posts. Command is a human activity and technology will not change that.[59] Technology cannot become a false hope which will clear the fog of war away. The commander must understand the limitations of technology just as he understands what his forces can and cannot accomplish.

Radio communications are an example of what technology can bring to the battlefield while not altering the theories of command. Radio provided an advantage to the commander by freeing him from fixed communications nodes. This allowed the commander to move forward in a small command group to see and influence the battle. Furthermore, decisions and orders could be sent quickly, allowing for more preparation and quicker execution. Regardless of the tempo of operations, weather, or time of day, commanders could stay in touch with control nodes and the tactical commanders. Limitations continued through enemy action and terrain, but commanders could move about the battlefield to the decisive point, as necessary, so that their presence could influence the battle.[60] Whether it was Napoleon moving to the sound of the guns in 1809 or General Gavish of the Israeli Army in the Sinai campaign in 1967, the commander positioned himself to influence the battle and direct overall operations.[61]

Technology which facilitates the commander's ability to "see" and influence actions across a widely dispersed battlefield, while conducting simultaneous operations, further allows him to bring order from chaos. Command judgement and responsibility remain the prerogative of the commander. Operational commanders require means such as SATCOM or

teleconferencing to control the effects of formations, while obtaining a feel for widely dispersed operations. The commander can then evaluate the accuracy of information and success of the operation, while maintaining a focus upon the end state of the operation through his vision.

The "theoretical" or "ideal" commander is not overawed by technological innovation, rather he uses it to advantage, constantly reviewing the situation looking for opportunities. Further, he understands the effects of terrain and time/distance factors which influence movement and actions on the battlefield. The synchronization of fires, logistics, protection, maneuver, and command and control emphasize the maximizing of capabilities while minimizing limitations. Timely, accurate decisions, are founded upon accurate, factual information obtained from subordinates. In order to ever achieve this ideal, command methods to achieve these goals must be reflected in the doctrine of battle command.

III. DOCTRINAL ANALYSIS OF BATTLE COMMAND

Doctrine bridges theory and practice through the development of certain doctrinal principles. These principles then provide the basis for tactical, technical, and operational procedures. Technological innovation most often comes at this level of tactics, techniques, and procedures (TTP). Command has always been a human endeavour, so the principles of command generally remain consistent, even with the emergence of new technology. The technological impact falls upon the "exercise" of battle command. Intent, vision, mission, and communications still serve as basic concepts and implements of command.

A comparison of U.S. Army doctrine, (the 1941 and 1949 versions of U.S. Army FM 100-5, Field Service Regulations (FSR): Operations, FM 100-5 (1993), Operations; FM 101-5, Command and Control for Commanders and Staff; TRADOC PAM 11-9, Blueprint of the Battlefield) indicates the concepts have changed little over time. Further, doctrine provides a bridge to the reality of battle and a foundation for the historical examples which follow.

The 1941 edition of FM 100-5 stressed in much the same way as classical theory that man was the fundamental instrument of war; other implements may change, but "he remains relatively constant".[62] The impact of dispersion and modern weapons required cohesion and teamwork which was built through good leadership. The commander exercised decisive action above all else. Critical traits were: anticipation, flexibility to combat friction and the unexpected in war, and mission focus.[63] These qualities allowed the commander to assess

information quickly, make an estimate of the situation, and then make a decision. This rapidity of thought was deemed critical for good leaders. Those who avoided or delayed decisions lacked "energetic leadership" which led to lost opportunities and failure.[64]

To exercise command, leaders required a strong sense of responsibility, determination, a willingness to take risks in the face of adversity, and an iron will to accomplish the mission. Command was a continuous, changing process which might call for new decisions at anytime.[65] The successful commander was able to balance all these requirements, always staying focused on future missions and objectives. During his estimate of the situation, the commander considered the mission assigned, forces available, the enemy, and the area of operations. Further, when considering courses of action, the commander had to consider which would best facilitate future operations. The implication was that mission accomplishment and the establishment of favorable conditions for future operations served to focus the commander, thus providing the foundation for "seeing" and influencing the battle.[66]

The August 1949 edition of FM 100-5 incorporated the tactical lessons of World War II, including those characteristics and skills required for the successful combat commander. Despite improved technology, the individual as part of a team was still considered decisive on the battlefield. Unit cohesion and teamwork required good leadership and discipline. Leaders accomplished this by conducting personal visits, sharing danger, and having personal contact with "mental, moral, and physical state of troops".[67] Leaders needed to be confident, self-reliant, energetic, and determined in execution.[68] They required strength of will, knowledge and vision to anticipate future operations; moral and physical courage. These attributes contributed to self-confidence, bold and determined action. Leadership such as this would overcome or "offset numerical inferiority" and maintain the initiative.[69] In addition to this consideration, the commander remained focused on the mission, while monitoring the proportion of expenditure of combat power. The key was decisive action to gain material advantage over the enemy. Ultimately, the staff assisted the commander and received guidance from him. All decisions; however, were his responsibility.[70]

Doctrine is not focused at one level, but extends through the tactical, operational, and strategic level of war. The tenets embodied in current doctrine, FM 100-5, Operations (1993)--**agility**, **initiative**, **depth**, **synchronization**, and **versatility**--are not solely American

characteristics and are not limited to any particular service or nationality. Their application may be influenced by technology, but the tenets are intellectual, rather than physical. These mental states bridge the gap from theory to practical execution of command.[71]

Agility represents the intuitive grasp of the commander. Great boxers show agility by sustaining an intuitive grasp of their own position and their opponents in the ring, while maintaining balance and power to strike a blow. Similarly, operational commanders in modern battle must continually shift, with the unexpected often becoming the expected. The commander must have mental and physical agility since battles are a contest of wills. Opportunities appear and disappear continuously with victory going to the commander with the balance and foresight to strike or shift at the proper time. Agility develops from a keen sense of what is happening in battle, arising from the knowledge, experience, and intuition of the commander. He must transition rapidly from one situation to the next, anticipating options, while always maintaining more options than the enemy.[72]

Initiative for the commander requires flexibility of thought and vision of the development of the operation. He develops initiative from experience and competence gained through years of study and operational assignments. Commanders who ensure they maintain the initiative, dictate the tempo and terms of battle to the enemy. The decision cycle for the commander and staff must be quicker than that of the enemy. Part of this mental and physical quickness is the understanding of the commander's intent and the ultimate objective. The need for this tenacity has increased in importance by the fast-paced tempo of modern battle. Anticipation and imagination combine to allow the commander and units to take advantage of vulnerabilities and opportunities which arise in battle.[73]

Depth is applied to the commander's understanding of the influence of the battle space with respect to time, space, and resources. Linear thought is no longer sufficient since the commander must fight a war that is a continuum of actions in space and time. Modern weapons systems, communications abilities, and dispersed forces have increased the tempo of battle. Increased mobility, higher sortie rates, and naval force capabilities have compressed time and space. Commanders must view the plane of action as the chess master does. The game or operation is a series of interrelated actions -- each move becomes a prelude to a series

of future actions. The commander's vision and intuition give him the ability, over time and space, to recognize future vulnerabilities and opportunities while reducing enemy options.[74]

Synchronization provides the commander his most difficult tenet to apply in joint and combined operations. It is similar to the workings of a watch with hundreds or thousands of parts. The time piece must be assembled precisely and work in unison or it will not run properly. In warfare, the commander must guide his staff and make decisions in order to synchronize the movements of resources to the proper time and place on the battlefield. The commander must harness the agility and initiative of subordinates, synchronizing them throughout the depth of the battlefield to ensure success. This is critical to achieving unity of effort and efficient action. The process must continue despite friction inherent within the system of command. The problems are not overcome solely by planning, but by a trained staff, guided by a clear vision and steady focus of the commander.[75]

Versatility is to the pentathlete as agility is to the boxer. The pentathlete trains and competes in five different, military-style events; the boxer only one. Commanders must be able to task organize forces, move from one mission or environment to another rapidly, all while maintaining mission focus. During World War II and Korea, the Army adapted quickly to the environment and tactics of the enemy.[76] Versatility requires the commander to maintain his vision and to provide clear guidance to subordinate units and staff in order to operate across the full range of military operations.

The U.S. Army's senior leadership manual, FM 22-103, Leadership and Command at Senior Levels, deals specifically with the higher level command and management. The operational commander must control the unit through indirect leadership. Further, he must use subordinates to build functional suborganizations within the greater whole. The operational commander must also rapidly assess situations, work within uncertainty, and understand enemy and friendly capabilities. During peacetime he must build the teamwork and vision for the unit while continuing to study the art of war. To provide a focus for the organization, the leader must provide a vision of what the organization must do and is capable of doing at a future time.[77]

The U.S. Army's capstone manual on command and control, FM 101-5, Command and Control For Commanders and Staff, describes the roles, relationships, organization, and

responsibilities of the commander and staff from battalion to corps. The focus is on tactical units with staffs and thus has limited utility for operational formations which may exist above corps. It specifically addresses battle command and the role of the commander.[78] The importance of the commander being the central figure in planning appears blurred. While the commander is key to action, his estimate is considered the same as the operations estimate. This is misleading. The commander's estimate is performed by the commander, separate from the staff, with information from the staff and based on the commander's experience and intuition. As part of the decision making process, the staff presents, time permitting, their estimates to the commander. He then makes a decision, based on the urgency of the situation, as to what course of action to pursue. If necessary, the commander may go with just his own estimate and inform the staff what actions are to be taken.[79]

TRADOC Pamphlet 11-9, Blueprint for the Battlefield, provides an additional focus on operational command, to include the exercise of authority and control over assigned forces and resources. It is accomplished through the arrangement of resources in time and space to meet the commander's end state. The commander assigns missions, allocates resources, maintains a focus on the objective, and clearly understands constraints and restrictions on the force. These requirements demand the commander anticipate, think, and visualize the battlefield beyond the present or current tactical situation. Tactical commanders fight the battles which contribute to the success or failure of the operational aim. The operational commander sets the conditions for tactical success by providing resources and anticipating future actions. Further, the operational commander determines when proper conditions are achieved to initiate battle. The commander's initiative directs the decisive action. Once it has begun, the operational commander provides maximum latitude and flexibility to his subordinates, while providing resources to them to fight the tactical actions.[80]

Comparing past and current doctrine with theory, one finds a good match. What sets the timeless challenges apart, however, from modern combat is the scope, intensity, and tempo which confront the operational commander. Doctrine requires the commander to conduct an estimate of the situation. This fits with the theoretical need to assess what is true and possible while making decisions based upon that information. It also provides a means for the commander to stay focused on future operations with a view to keep the force positioned to

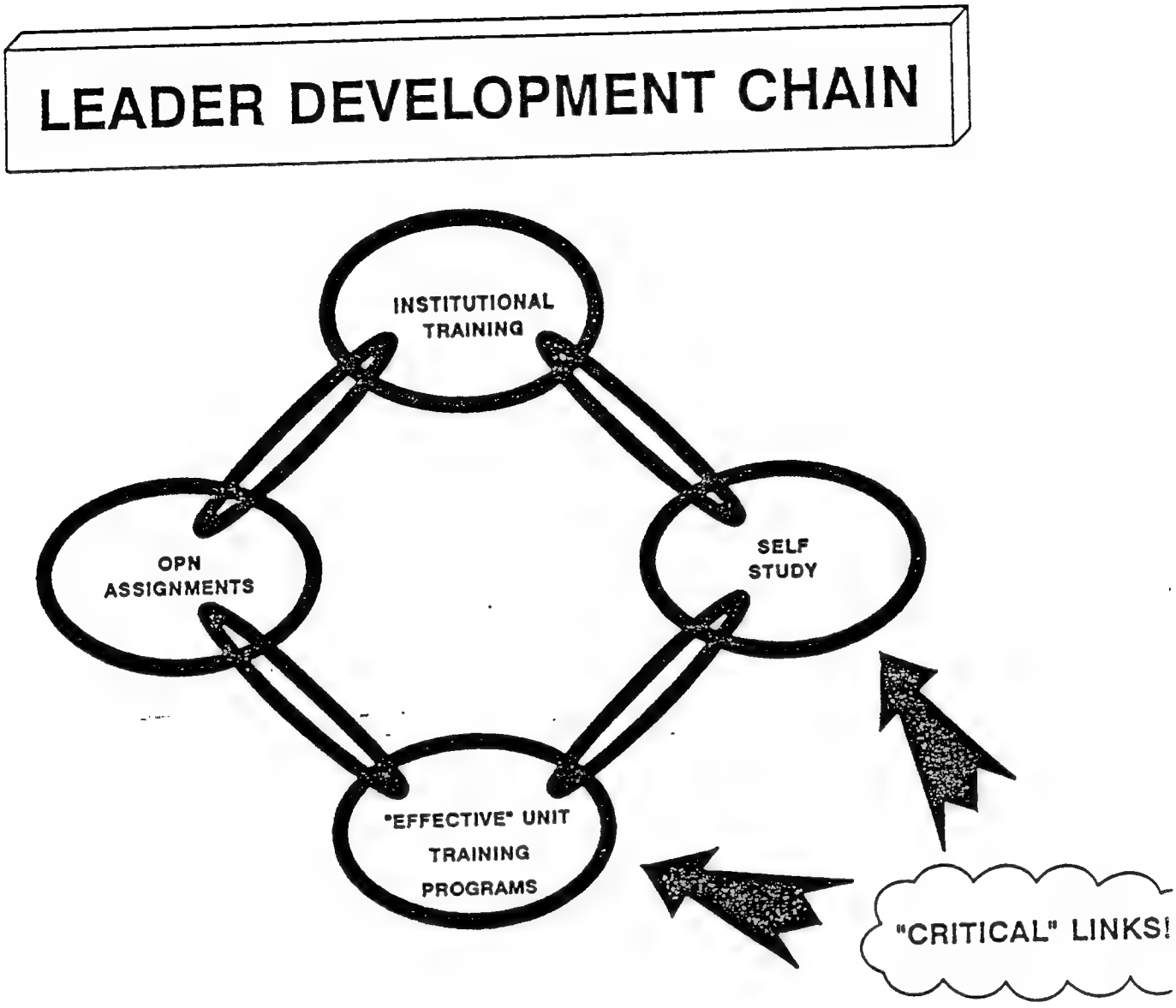
conduct subsequent operations. Current doctrine additionally requires a commander to visualize the battlefield and influence action. He does this by positioning himself forward on the battlefield with subordinates. Further, he anticipates future requirements, makes decisions to provide and synchronize resources for subordinates, and sets the conditions for success throughout the depth of the battlefield. All the while, he remains focused on the objective, determined, resolute of purpose, and maintaining the initiative to achieve victory.

IV. TRAINING THE ART OF COMMAND

Leader development in the Army has four links which influence the training of battle command (Figure 1). Operational assignments and unit training programs serve as the proving ground for Army institutional training (platoon leader to corps commander) and individual self study. During those assignments, unit training requires the leader to prepare for particular missions, study the profession, and learn from each activity through after action reviews (AARs) and lessons learned. Leader development progression is similar to that of the master craftsman of the Middle Ages. Through initial assignments and training, individuals are apprentices in the art of battle command. Later, as they progress through command to field grade rank, they become journeyman of the art. Finally, as they approach senior level command, they become the masters, still learning, but now imparting their knowledge to others.

Tactical decision exercises are used throughout the U.S. Army as instruments to teach various learning objectives. Students attending Officer Basic and Advanced Courses serve in leadership or command positions during exercises which require planning actions and decisions to tactical situations. Through 1993, the U.S. Army Command and General Staff College (CGSC) used tactical scenarios to train the staff process, but little was done to include training in the art of command. Students functioned mainly as staff officers at the brigade, division, corps, and joint task force level.[81] The U.S. Army War College focuses on the strategic level and the development of strategy and national policy again ignoring specific training in Battle Command.[82] So while training the art of command at lower tactical levels, command at the operational level has previously been neglected. In January of 1994 an elective course on Battle Command was begun at CGSC.[83] The Tactical Commanders Development Course (TCDC), a two week pre-command course, has also begun using vignettes focused on

FIGURE 1[83]


LEADER DEVELOPMENT CHAIN
INSTITUTIONAL TRAINING
OPN ASSIGNMENTS
SELF STUDY
"EFFECTIVE" UNIT TRAINING PROGRAMS
"CRITICAL" LINKS!

"battle command" in the second week of instruction (Battle Command Development Course-BCDC) for maneuver commanders (Infantry, Armor, Aviation). Future brigade and battalion commanders are given the opportunity to visualize the battlefield while contemplating how they can influence the battle under various scenarios.[85]

The Army works diligently and expends significant resources to train tactical leaders within units. The Combat Training Centers [CTCs--National Training Center (NTC), Combat Maneuver Training Center (CMTC), and Joint Readiness Training Center (JRTC)] provide realistic tactical training for units, while the Battle Command Training Program (BCTP) provides the same training for Corps and Division commanders and their battle staffs. BCTP is the capstone training program for Army leaders. These training programs have also integrated joint and combined operations into the training scenarios.

These exercises serve several crucial purposes in the professional development of officers. Tactical battle command problems allow an officer to demonstrate the ability to use the military decision making process. The leader must understand the capabilities and limitations of his own organization as well as that of the enemy. Further, the soldier or staff must comprehend how orders and plans influence forces, both vertically and horizontally, creating opportunities for future operations. Decision and planning exercises assist in developing leaders and staffs which have tactical and operational awareness.

Development of leaders requires more than the exercises which occur at the unit and institutional level. Self study and education of competent, confident leaders is of paramount importance. Self development is critical for future growth as a leader and to exercise battle command. General Patton stated, "Those who achieve greatness did so outside of schools, through very intense and lifelong self-study of their profession."[86] This self study grows in importance as one increases in rank and responsibility. It seems theory and our doctrine are in agreement on battle command, but our training focus requires refinement. We train tactical leaders fairly well; however, the only training done for operational battle command occurs during a corps level BCTP rotation. Little is done above the corps level for joint or combined commanders.[87] Looking at the training and careers of two historically famous military leaders (Generals Patton and Ridgway) may provide some insights on how to train individuals in Battle Command for the future.

V. HISTORICAL PERSPECTIVE OF BATTLE COMMAND

General George S.Patton Jr.

General George Patton's preparation for command of Third U.S. Army was based primarily on his combat experience and expertise with armored warfare. As a young officer, Patton had served with the Punitive Expedition to Mexico in 1917 and commanded a tank brigade in World War I. His armored experience resulted from serving with cavalry forces which transitioned to mechanized units, diligent self study, command of the 2nd Armored Division, the I Armored Corps, and the Desert Training Center prior to World War II. As commander of Operation TORCH, the amphibious invasion of North Africa, he conducted one of the first large-scale, joint operations of the war. His leadership of II (US) Corps during North Africa involved joint (U.S. Army Air Force) and combined (British and French) operations, as well as mechanized warfare in the desert. After North Africa, Patton commanded Seventh (US) Army during the Sicily campaign, capturing Messina using combined arms operations and short, amphibious envelopments. As a result of his numerous assignments, many considered General Patton the most experienced American combat commander until the Normandy invasion. General Eisenhower, the Supreme Allied Commander in Europe described him as the most flexible of generals, someone who always took care of matters, both big and small.[88] During the Central European campaigns of World War II, Patton's command was primarily a joint one, with support from IX Tactical Air Command. Further, Third Army conducted limited combined operations with Free French Forces (FFF)and resistance groups.

The rapport General Patton developed with his soldiers was electric, the personal image he cultivated appealed to the basic motivations of combat soldiers. Patton was an actor who carefully played the role of warrior in dress and action.[89] His dominant belief was that a commander's place was at the front leading his soldiers, where he could see and influence the combat actions of his subordinates. He would conduct himself in this manner through the long campaigns in Central Europe, despite weariness, cold, and vicious fighting.

Early during the staff planning process in England prior to the Normandy landings, Patton provided broad guidelines for essential elements of information which his staff would later refine. Many of these statements were nothing more than thoughts on how the Third Army would fight, visualizing how he felt the campaigns on the continent unfolding. Patton also

had a study conducted of the roads in Normandy used by William the Conqueror, reasoning that those very roads would be useful in TUSA's drive across France.[90] He envisioned operations starting at Nantes on the Atlantic coast and following an axis east along the Loire River focusing, on the fortress city of Metz. Further, he believed the Army would not cross the river unless compelled to do so by enemy action. This broad statement of intent set the stage for the coming campaigns, anticipating enemy actions and ultimately providing a fairly accurate vision of the battle on the continent.[91]

The Ardennes campaign began on 16 December 1944 with a German counteroffensive into a weakly occupied sector of the Allied front in the Ardennes (Map 1) held by Major General Troy Middleton's VIII Corps of First (US) Army (FUSA). During the Ardennes battles, British General Sir Bernard L. Montgomery took operational command of all forces (British, FUSA and Ninth (US) Army) north of the German penetration (Map 1--Eisenborn-Malmedy-Celles). General Omar N. Bradley received operational command of all of FUSA forces south of that line and Patton's Third Army. Sixth Army Group under General Jacob K. Devers assumed part of the Saar sector from the Third Army and remained on the defensive.[92] Montgomery counterattacked the German breakthrough with FUSA attacking south to link-up with Patton's TUSA in the vicinity of Houffalize.(Maps 1,3) The campaign was an exacting one, filled with tenacious fighting, horrendous weather, difficult situations and synchronization of forces, and heroic actions on the part of the American soldier. By the end of January 1945, the Ardennes campaign or "Battle of the Bulge" had ended with American forces firmly established inside the border of the German Reich near the Rhine River.[93] (Maps 1,3)

Patton's finest hour as a commander was his handling of TUSA during the Ardennes campaign. As early as the ninth of December, Patton had considered the possibility of a German offensive through Luxembourg (Map 1) on his northern flank in the First (US) Army zone. General Patton always wanted to maintain the initiative, demonstrated by the belief that he normally was thinking ahead of the Third Army staff. Patton was a master at improvisation and synchronization with a "sixth sense" or intuition which enabled him to "get into the enemy's thinking" and anticipate their moves. At the beginning of the German offensive, General Patton anticipated the German attack with typical aggressiveness. "If they attack us, I'm ready for them. But I'm inclined to think the party will be up north. VIII Corps

has been sitting still - a sure invitation to trouble".[94] Patton's intuition and ability to anticipate and "see" the battlefield led him to conclude on 19 December that Bastogne lay on the axis of a "presumptive counterattack". He visualized Bastogne as key terrain and a critical objective on the way to St Vith and beyond to "cut Germans off".[95] The Germans on the other hand had completely ignored or overlooked the significance of Bastogne to their ambitious plans.[96]

Patton was an agile, aggressive, offensive minded commander. To maintain momentum and initiative Patton believed, "The only way you can win a war is to attack and keep on attacking, and after you have done that, keep attacking some more...."[97] Despite misgivings by Generals Eisenhower and Montgomery concerning Third Army's ability to conduct a three division counterattack within 72 hours on 22 December, Patton contended, "I maintained my conviction that it is better to attack with a small force at once, and attain surprise, than it is to wait and lose it."[98] Unknown to either Eisenhower or Montgomery, contingency planning by Patton and the TUSA staff had started on 9 December 1944.[99]

Patton's contingency plan envisioned a counterattack north with three divisions. Moreover, he pushed his staff and commanders to know the enemy and never underestimate him. When Patton was informed of German movements in First Army sector, he ordered reconnaissance plans and operations expanded to include the enemy buildup areas. Patton believed that these forces could influence his planned offensive into the Saar within twenty-four hours.[100] Third Army contingency planning resulted from Patton's intuition and preparedness to respond to an attack.

Patton's initial offensive plan called for an assault through the Saar by two corps to destroy all enemy forces west of the Rhine, therefore eliminating them as a factor in crossing the river. III (US) Corps was to be held in reserve to exploit the breakthrough. Upon notification of the Ardennes offensive, Patton saw it as an opportunity to execute his offensive and stay focused on the objective, "German offensive perfect, Third and Seventh Armies could continue attack and expose German rear area and trap forces west of Rhine."[101] Patton realized however, the plan was "too bold for 12th Army Group, 21st Army Group or SHAEF."[102] On 19 December, General Dwight D. Eisenhower, Supreme Allied Commander, called a conference at Verdun for planning the Allied response to Field Marshal Von

Rundstedt's breakthrough in the Ardennes. Patton presented his counterattack plan to Bradley and Eisenhower. With his staff planning the movements required, Patton's intent and determination were articulated. He would attack with III(US) Corps, "I'm positive I can make a strong attack on the 22nd, but only with three divisions, the 26th, 80th Infantry, and the 4th Armored. I cannot attack with more until some days later, but I'm determined to attack on the 22nd with what I've got."[103] General Bradley described Patton's performance in glowing terms, "His generalship during this difficult maneuver was magnificent, one of the most brilliant performances by any commander on either side in World War II."[104]

The campaign objective for TUSA was clear: blunt the German attack. Patton remarked, "Everyone in this Army must understand that we are not fighting this battle in any half-assed manner. It's either root-hog or die. Shoot the works. If those hun bastards can do it that way, then so can we."[105] Patton viewed TUSA positions along the Saar as a base of operations and a start point for future operations into the Palatinate and to the Rhine. Once the counterattack was under way, Patton focused on a "power drive to the Rhine" with a focus on a breakthrough and exploitation for decisive action.[106] Patton's final appraisal of the counterattack by Third Army, "Some people call it luck, some genius, I call it determination."[107]

General Patton made maximum use of technology to command forward, while maintaining contact with his staff through the extensive use of a mobile command post throughout the Ardennes campaign. He organized a fast, mobile CP that was designed to operate in fluid, constantly changing situations. This mobile command post provided accurate information to support decisions anywhere on the battlefield.[108] He was always forward, using his personal presence to influence the campaign while more clearly "seeing" the battle first hand by serving as his own "directed telescope".[109]

Instilled with Patton's vision and drive, the TUSA staff worked tirelessly, performing meticulous planning, turning three divisions ninety degrees and moving them over snow covered roads to attack in forty-eight hours. When the staff issued a directive, Patton seldom interfered. This allowed him more freedom and flexibility to go forward and visit soldiers and commanders. In line with the 1941 edition of FM 100-5, Patton routinely conducted his own command estimates. He asked staff officers specific questions concerning required details. In return he

desired direct, clear answers. During the conference at Verdun, Bradley and Patton were discussing the situation in Bastogne. General Patton called LTC Oscar Koch, the TUSA G2 in and asked, "Should Bastogne be held?" Koch responded that it should with a short explanation of his rationale. Bradley nodded to Patton and Koch left the room.[110] This was typical of the trust Patton had in his staff.

While his continuous, personalized command at the front may have benefited the Third Army staff, some say this continuous presence put Patton into a position to make meddlesome tactical decisions. Often these decisions were actually approvals of ones already made by subordinate commanders. Further, Patton understood the need for subordinates to comprehend the commander's vision and intent. During WWII, and specifically the Ardennes campaign, divisions and corps were shifted between armies as the situation warranted. Therefore, it was difficult for subordinate commanders to understand Patton's vision without meeting with him. Patton's forward presence frequently facilitated this process, the rest could be accomplished rapidly because of the trust Patton had in his staff.

When his decisions proved wrong, Patton would take responsibility himself. One incident proves very insightful in this regard. Major General Hugh Gaffey, Commander of 4th Armored Division, sought approval to continue attacking toward Bastogne at night on 24 December, after continuously maneuvering and fighting for over two days. It was questionable whether this attack would succeed, and it eventually failed. Patton immediately took full responsibility for the action stating, "[The] soldiers were tired from fighting around the clock. It was too difficult."[111] In retrospect he believed a short pause might have helped the unit accomplish the mission and that it was his responsibility that the mission failed. In no way did he blame the leaders and soldiers of the 4th Armored Division.

In another incident of the Ardennes campaign, Bastogne had been relieved by Combat Command R of 4th Armored Division on 26 December.(Map 2) At that point Patton felt that the Germans were losing ground and that SHAEF should commit one or all of the three divisions (11th Armored, 17th Airborne, 87th Infantry Divisions) held in reserve. SHAEF released 11th Armored Division to TUSA and the division closed on Bastogne by the twenty-ninth. The 11th Armored Division counterattacked Field Marshal Manteuffel and 1st Panzer Army who were attempting to cut Bastogne's line of communication. On January 1, 1945, both

attacks stalled. (Map 2) Upon learning of this, Patton went directly to 11th AD and met General Middleton, VIII Corps commander, where both learned that the division had lost forty-nine medium and fifteen light tanks in action. The division commander planned to use January 2 to refit and reorganize. Patton ordered the attack forward and by late that evening, 11th AD had secured its objective of St. Etienne. Patton's actions and vision maintained the initiative and momentum of the attack, keeping the 11th AD focused on its mission.[112]

Third Army was composed of ordinary soldiers, inexperienced and unschooled in the art of war. Many were not volunteers. They fought with a skill and determination that made them one of the most successful armies in World War II. General Patton was the source of that drive and determination. He had the ability to make men go out and give everything they had to accomplish the mission; to do what seemed impossible to do. When asked what outfit he had been in, Third Army soldiers would reply "usually with pride, sometimes with hatred, but never indifference --'Patton's Third Army'".[113]

General Matthew Ridgway

General Matthew B. Ridgway had prepared himself for command over many years of experience and study. To him, this study and training anticipated the time when the responsibility of standing to fight, attacking or withdrawing would be his responsibility alone.[114] Throughout pre-WWII service in the Orient, WWII command of an airborne division and corps, Ridgway had led soldiers brilliantly. From Sicily to Normandy, through the Ardennes to the Baltic, he had gained insight into command of soldiers in battle. In a variety of assignments after the war, he developed an understanding of communist methods, purposes, and strategies. When the North Korean communists invaded South Korea on 25 June 1950, he was convinced that communism must be stopped in Korea.[115]

Major General Walton Walker, Commander of Eighth Army, died in a vehicle crash on the morning of December 23, 1950. Major General Walker had commanded Eighth Army during the tough days of summer 1950 in the desperate battles along the Naktong River around the Pusan perimeter. (Map 4) In the breakout and pursuit in September and October, General Walker had led his troops north first to link up with X(US)Corps at Inchon, then to retake the Korean peninsula only to run into the Communist Chinese forces in late November.

The chance that Walker might be killed in action had been discussed by General MacArthur and the Army Chief of Staff, General Collins, as early as the Pusan battle. In that event, MacArthur had asked that Lieutenant General Ridgway take command of Eighth Army. MacArthur was familiar with Ridgway's WWII record and had known him from service at West Point. Also Ridgway, as the Army's Chief of Staff for Operations and Administration, had been involved in shipping reinforcements into the theater and therefore understood the complexity and difficulty due to the Chinese intervention.

Upon arriving Christmas Day 1950, General Ridgway took command of a demoralized, retreating army which had been pushed back to just north of Seoul. How General Ridgway turned Eighth Army around and hurled the Chinese with awesome casualties back into North Korea is a story of heroism of the common soldier, complemented by dedicated combat leadership -- battle command. A resolute leader who demanded the best from every man and unit, Ridgway was unencumbered by fear or apprehension and had the utmost confidence in himself and his men.[116] General Ridgway exhibited courage and personal presence of command, an aura of determined leadership. The most striking feature about Ridgway was this determination he radiated, which many close associates found hard to describe. One compared it to Superman, the impression being that Matt Ridgway could "knock over a building with a single blow, or stare a hole through a wall, if he wanted to".[117] This very powerful presence was opposite of the attitude he initially encountered in Eighth Army.

Ridgway was offensive minded, clearly anticipating the need to regain the initiative in January 1951, but his staff was initially skeptical. He wanted to retake the initiative from the communists and expected his units to punish the enemy.[118] During January and February 1951, General Ridgway focused on exploiting the capabilities of the forces under his command to the maximum extent possible. Despite a lack of clear political direction, Ridgway correctly anticipated the requirements of the authorities in Washington. He realized that offensive action and maintaining the initiative allowed those at the National Security Council and the National Command Authority time to formulate policy and make well-thought out strategic decisions.[119] Further, he did not want to have UN forces restricted below the 38th parallel since this would provide the enemy another sanctuary. (the first being China north of the Yalu).[120] He

anticipated that future operations would end around the 38th parallel; therefore, offensive operations were structured to achieve roughly this line. (Map 4)

The problem Ridgway perceived when he took over Eighth Army was poor division and corps commanders who lacked aggressiveness and determination. General Ridgway sent a message to General Collins, the Army Chief of Staff, that, "I will be ruthless with our General officers if they fail to measure up".[121] To instill the Ridgway style, he gave specific instructions upon taking command. Commanders must know the enemy, terrain, and their subordinates; stop abandoning equipment; maximize firepower; scrutinize awards; visit wounded and encourage them to rejoin their units; take care of soldiers; and leave command posts and conduct aggressive reconnaissance.[122]

Ridgway himself conducted personal reconnaissance by aircraft forward of UN forces. He commanded up front with an advanced command post (CP) forward with the corps CPs. He visited units everyday, demanding discipline, aggressive action, and taking care of soldiers. He restored the fighting spirit of EUSA by sharing the hardships and the experiences of the soldiers. [123]

General Ridgway's actions tipped the balance in Korea. His message to the troops and the Korean government was simple; he was there to stay and would give his utmost, he expected the same from them.[124] His leadership turned Eighth Army around and set the stage for the offensive actions in 1951.[125] He was constantly at the crises action point, where the going was tough, without trespassing on subordinate initiative. Probably the best description came from Rutherford Poats, an United Press (UP) reporter: "What he had to say reflected a deep insight into the psychology of his own troops and of the enemy. What he had done in helping Eighth Army regain faith in itself recommended him for a place in the select company of the great."[126]

The vision and objective focus of General Ridgway are brilliantly stated in this order to Eighth Army. "We are interested only in inflicting maximum casualties to the enemy with minimum casualties to ourselves. To do this we must wage a war of maneuver - slashing at the enemy when he withdraws and fighting delaying actions when he attacks."[127] Further, he sought to instill in every soldier confidence that Eighth Army had the capability to remain

in Korea indefinitely while the delay merged into the defense and ultimately the offense. This became the "Ridgway plan": offensive-defensive.[128]

This "Ridgway plan" was developed during early January 1951. Operations would be offensively-oriented with limited retrograde maneuvers to stabilize the front. Strong armored counterattacks, supported by all arms, would be executed at every opportunity. The primary objective was to inflict maximum losses on enemy personnel and material, while achieving the maximum delay possible.[129] During February 1951 the only change to the focus of Eighth Army was the return to "gradual advances forward".[130] By 20 February 1951, Ridgway ordered a general resumption of the UN offensive with Operation Killer. The primary objective of this offensive was to destroy enemy forces east of the Han River. Further, his focus and intent for the operation were stated clearly, "Inflict maximum losses on the enemy, meanwhile maintaining intact all major units and effecting all necessary coordination within and between corps."[131] (Map 4)

Eighth Army continued offensive operations into March, liberating the entire width of Korea from Seoul to within ten miles of the 38th parallel. The primary objective continued to be the destruction of enemy forces through the synchronized use of firepower and maneuver by all UN ground-naval-air forces. The occupation of terrain was a secondary concern and usually resulted from inflicting maximum punishment on the enemy.[132] Throughout March, Ridgway continued offensive operations, remaining focused on destroying, not defeating, enemy forces and material. All operations were conducted in depth, with air and naval strikes deep into the 38th parallel area and North Korea. Further, the 187th Regimental Combat Team (Airborne) was dropped to the rear of enemy positions simultaneously with the execution of ground maneuver to seize Hongchon and Chunchon while destroying enemy forces, material, and supplies.[133] (Map 4)

By late March, ground forces had reached the Taepo-Ri--Pukhan River--Masan-ni area. Ridgway left to his corps commanders the discretion of adjusting this line to capitalize on any opportunity or favorable terrain.(Map 4) While providing his commanders latitude to execute their missions, Ridgway anticipated a Chinese attack in April 1951. To meet this threat, he planned a fighting withdrawal to inflict maximum losses on the enemy while maintaining friendly units intact and the freedom to maneuver. On 22 April the attack began with Eighth

Army conducting a fighting withdrawal, stopping north of Seoul. Ridgway then prepared to counterattack with an order to Eighth Army allowing a withdrawal again only under "extreme pressure". As an army, Eighth Army would never withdraw again.[134] Ridgway's vision and focus were continued even after he went to Japan as CINCFE/CINCUNC replacing MacArthur. General VanFleet continued the aggressive operations envisioned by Ridgway superbly fighting the Ridgway plan in late April against the Chinese offensive.[135]

When General Ridgway went to Korea in December of 1950, he he did not inculcate in EUSA anything it had not already learned and demanded nothing it could not accomplish. Decisive leadership was Ridgway's legacy to EUSA.

General George Patton and General Matthew Ridgway displayed a brilliant capacity and ability to exercise battle command. Both were extremely successful and are personally credited with turning around potentially disastrous situations. Ridgway had probably the more difficult situation due to the ambiguous political situation and a truly joint/combined command. Patton, however, was a master at maneuvering forces in extremely fluid situations and the German military had a greater capacity for synchronized action than the Chinese. Both Armies (TUSA and EUSA/UNC) excelled when faced with the unexpected, proving to be up to the task. To Ridgway's credit, after his departure in April 1951, Eighth Army continued to operate in an outstanding manner. Patton and Ridgway exploited technological advances such as aircraft and radio to command forward while maintaining contact with subordinate commanders and staff. Finally, Ridgway and Patton were able to see the battlefield and influence action in order to stay focused on the ultimate end state and objective. Each embodied the very essence of battle command.

VI. THE FUTURE OF BATTLE COMMAND

The complexity of battle command has grown since the days of World War II. The U.S. Army, and the military as a whole, have undergone a change in mission and focus with non-traditional military roles emerging for the battle commander. Joint, combined, and interagency operations are more common than ever before. More significantly, the battlefield has grown more complex and fraught with ambiguity.

Command as characterized in theory is clearly useful, and battle command, as outlined in current doctrine, serves as an extension of the theoretical discussions on the importance of the commander. Battle command focuses on the commander, emphasizing "command" rather than "control". Leader development programs within the military must develop adaptive leaders and better prepare commanders to exercise operational battle command. Personality of the commander, especially in joint and combined operations can often be critical. A commander's force of personality, as Patton and Ridgway showed, provides a common purpose and motivation to succeed. The common vision requires not only well-articulated goals shared by members of a joint force or coalition/alliance. It involves the efforts of leaders who inspire, motivate, and direct multi- service and/or cultural forces in the successful execution of the campaign.

The commander is the focal point for decision-making. By providing guidance and intent based on a vision of the battlefield, the commander focuses the staff on providing necessary resources and control for an operation. The key to these actions are the commander and staff estimates. The 1941 version of FM 100-5, Field Service Regulations(FSR): Operations, highlighted the commander's estimate as the critical part of operational decision making. Further, the commander's estimate was viewed as an independent action from staff estimates. The staff and commander work as a team, but the commander ultimately makes decisions. Current doctrine in FM 101-5 blurs the operations and commander's estimates while stating the commander's estimate is based in part on staff estimates alone.[136]

Current doctrine should reflect the intent and procedures provided in the May 1941 edition of FM 100-5, Field Service Regulations: Operations. The commander conducts an estimate based on available information, strategic guidance, and his own knowledge, experience, and intuition. He then compares the estimate to the staff estimates and provides guidance for the staff to begin planning, with the commander's estimate driving the staff process. The staff then facilitates control of resources, monitors execution of the plan, and provides information to the commander to enable him to make accurate, timely decisions. The commander makes decisions in a determined manner, taking full responsibility for all actions. He is the critical individual, while the staff serves a supporting role. Both Patton and Ridgway did this effectively.

The current Army staff manual, FM 101-5, provides the basis for courses taught in the Army professional development system. The commander's estimate is considered part of the staff process rather than a separate function with information provided by the staff. Without formal emphasis on a commander's estimate, the misconception continues that the staff drives decision making. The Battle Command and Training Program seems to highlight this point. Further, joint and combined education must continue to improve so that the requirements of battle command are reflected.

Current joint doctrine does not fully address operational vision and the need to anticipate on the battlefield. FM 100-5 goes along way toward this in the discussion of battle command, but Joint Publication 3-0, does not really address operational vision and battle command. Vision is more than the commander's intent. It describes an end state to be achieved, defines the tactical actions necessary to achieve operational success, and is procedurally focused. The synchronization of resources facilitates the conditions which allow for tactical success. The conditions link the anticipated battle and engagements into an overall campaign design to achieve the desired end state. Commanders must think like the chess master, an entire game in advance, while staying flexible when given new and changing information.

One way to focus battle command would be the publication of a joint "Battle Command" manual. Current Army doctrine could be used as a start point since it is the most developed concerning battle command. Properly structured, this manual could go beyond staff-commander interaction (FM 101-5), the broad definitions in FM 100-5, and expand the discussions of leadership and battle command. Command vignettes for situational learning could focus on command and leadership, control and decision-making. This joint publication would need to visualize how military power can be applied throughout the battle space to achieve victory. The manual could be interactive on CD-ROM to allow multiple solutions to a given situation. Further, this might contribute to the synthesis of leadership, tactical decision-making, and management skills throughout the services.

With continued improvements in communications equipment and technological advances which will lead to the "digitization" of the battlefield, the military, and Army in particular, must review how officers are prepared for operational command. Digitized

communications and information, smaller staffs, and mobile command and control (C2) may cause a revolutionary change to the way battle command is exercised. Commanders must command forward to see and influence the battle, while using technology to stay abreast of a myriad of information and situational changes. This situational awareness will be made easier with digitization; however, a potential problem exists. While the hierarchal structure of layers of command may change to a more open, non-hierarchal system, the commander must avoid "meddling". The operational commander must still allow subordinate commanders the latitude to fight their units as they deem appropriate, avoiding the Vietnam syndrome of orbiting helicopters and micromanagement. The operational commander provides the purpose and resources to accomplish the mission, while not telling the subordinate how to accomplish the mission.

Leader development and battle command continue to improve. At some point, with advancing technology, the leader development chain, (Figure 1 - self-study, institutional schooling, and operational assignments) can be improved. Operational assignments and study would focus on battle command and instruction on the operational level of war. With technological advances, a leader in the field could learn from exercises conducted at any military institution or joint command. The Leader Development Chain would become seamless leading to adaptive, creative leaders. Further, this self learning would greatly enhance performance in operational assignments.

Part of the solution could be the development of school scenarios (institutional training) and situational training exercises (STXs) which would assist unit leader training and self study. These scenarios would be based on "nested concepts" - intent and missions cascade to each subordinate to develop battle command. These lessons would serve to inculcate initiative through decentralized decision-making, improve mental agility and versatility via uniform operational thinking, and reinforce the responsibility for one's mission in the framework of the higher mission and concept. Further, the importance of superior communicative skills would be strengthened through the use of standard orders, which list tactical tasks and purposes in concert with common formats and preparation techniques. These STXs and vignettes could utilize interactive video and CD-ROM to allow leaders to make decisions and then receive feedback on the result of the decision.

VII. CONCLUSIONS AND RECOMMENDATIONS

Operational assignments and self study will continue to provide the most useful means of training operational commanders. While Ridgway and Patton both were students of the art of war and the art of command, they also had tough assignments which prepared them for command. Institutional training could not have provided such a realistic learning environment. Duty as commanders of a division, corps, and in Patton's case Seventh Army, provided the experience leading to success. Both Patton and Ridgway used their knowledge and experience to support intuition on the battlefield. They were able to "see" what others could not. They realized that command was a personal business, exercised by commanders who led and understood the opportunities and chaos of battle. Our future army will need intuitive, visionary leaders adept at the art of command.

Doctrine provides the bridge from theory to the reality of battle. Currently, joint doctrine is procedurally oriented and not focused enough on battle command. The problem appears to focus on the training portion of battle command. The programs recently instituted in CGSC and BCDC must be continued along with a clarification of the War College level of instruction. This senior level education should retain a focus on national policy and strategy, but also must begin to address operational battle command. The operational commander will be the one who will develop the stated strategy or policy into a coherent campaign plan, linked to tactical execution. Without this educational component, the doctrinal aspect of battle command will wither and die.

Battle command is a product of the commander's experience, training, and knowledge. With an estimate of the situation, the commander develops a vision of the campaign. The commander must have the moral courage to make tough decisions to implement his vision. Further, he must maintain a focus on the objective while maintaining flexibility to create opportunity. Technology may free the commander from the command post, but he must not

encumber subordinate commanders. With this in mind, the operational commander can conduct simultaneous operations leading to mission accomplishment.

APPENDIX 1 (DEFINITIONS)

BATTLE COMMAND:[137] Information challenges leaders, especially in this age of instantaneous communications. Commanders must assimilate volumes of information to visualize the battlefield, assess the situation, and direct action required to achieve victory. Like the chess master, commanders must think, anticipate, and act simultaneously. Visualizing the battlefield is a continuing requirement for the operational commander. Commanders cannot visualize the battlefield from a command post or computer screen, but must move among the soldiers and leaders of the command. Command remains a personal business and the commander must position himself where he can best influence the battle. Commanders "command", while staffs coordinate actions and resources to support the commanders vision of the battlefield.

Leadership at every level is the art of motivating and directing soldiers and leaders to accomplish a mission. The art of command is the visualization of the battlefield, present and future, both enemy and friendly, and then the development of operations to achieve the ultimate objective. Commanders influence the outcome of battles and engagements, operations and campaigns by assigning missions; prioritizing and allocating resources; assessing and taking risks; deciding how and when to take action; and providing guidance and motivation to the organization toward the desired end state.

Command contains two critical components: decision making and leadership. Decision making is knowing if to decide, then when, and what to decide. These are tactical, operational, and strategic judgements. Being in command means anticipating the activities that will put into motion the vision of the battlefield once a decision is made. Commanders must understand some decisions cannot be retrieved, some may carry stiff consequences if failure occurs, while others must be anticipated based on the execution of the decision. Leadership is the taking of responsibility for those decisions. Further, leadership involves loyalty to subordinates; inspiring and directing forces toward the objective; the establishment of teamwork to insure success;

moral and physical courage in the face of adversity; providing vision that focuses and anticipates the future course of events. Command is an art, guided in battle by intuition and feel gained from years of study and experience.

Command occurs where the commander is located. Leaders must position themselves to respond to opportunities and changing circumstances. Flexibility is critical for every commander, but especially the maneuver commander. The commander must understand the higher intent up two levels. Further, with an understanding of the concept of operations and a clear mission, the commander then fights his unit with confidence. He has the latitude to act boldly and anticipate events to accomplish his mission.

Control is part of battle command. It allows the commander to operate freely, delegate authority, lead from any critical point on the battlefield, and synchronize resources across the battlefield. The command system must support the commander's ability to adjust for future operations. Trained staffs work with the commander's vision and intent to control and monitor units while alert to enemy or friendly situational changes which require command decisions.

Reliable communications are central to battle command and control. Technology allows commanders to use space-based systems for navigation and positioning, communications, reconnaissance, and surveillance. These systems enhance the accuracy and speed of information which commanders have to make decisions. Despite these advances, technology assists the commander. Command, especially on land, remains a function of human will--the commander's will to accomplish an assigned mission.

BATTLE SPACE:[138] Within a given battle space, commanders must understand the effects of geography and terrain, apply appropriate resources, and use joint and combined assets against the enemy. Commanders seek to dominate the enemy throughout the battle space. Battle space is a physical volume that expands or contracts in relation to the ability to acquire and engage the enemy. It is not assigned by a higher commander, rather it is the commander's

concept of vision for dominating the enemy while protecting his own force. His vision is unencumbered by boundaries or phase lines, providing the freedom to build a broad visualization based on METT-T.

Battle space includes the combat power of all friendly forces which can be brought to bear on the enemy, including joint and combined units. Battle space also includes the operational dimensions of combat including time, tempo, depth, and synchronization. Battle space must be utilized to the greatest advantage possible. Using friendly strengths against enemy weakness while protecting friendly weaknesses remains critical. Further, unity of effort of every operation remains essential throughout the battle space. Where there is overlap, such as the Ardennes campaign and the battle space of First and Third Armies, then commanders must look for ways to employ assets to mutual benefit.

Understanding battle space allows commanders to maintain their options, protect and sustain the force, synchronize resources while hitting the enemy and keeping him off stride. Commanders must visualize the battle space to synchronize friendly forces and to apply them against the enemy in time, space, and purpose. They also consider how terrain may influence this application. Once the relationships and purpose are decided upon, commanders can array their forces within the depth, breadth, and space of the battlefield to meet the considerations of METT-T. Understanding battle space allows the operational commander to synchronize combat power against the enemy and to keep the enemy from extending his own battle space, while disrupting the enemy and setting the conditions for victory.

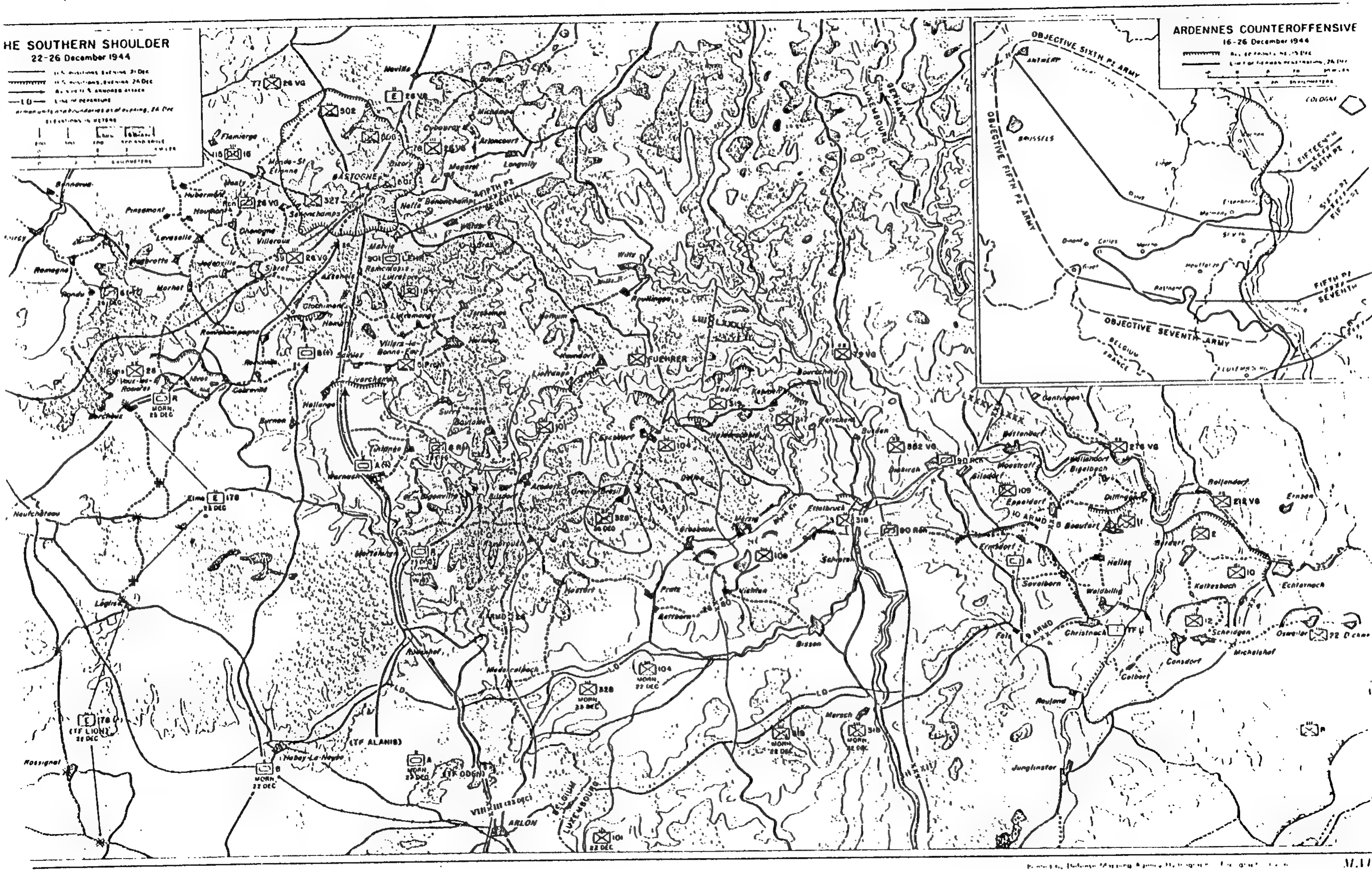
APPENDIX 2 (MAPS 1-4)

MAP 1: Ardennes Counteroffensive, 16-26 December 1944[139]

MAP 2: Widening The Bastogne Corridor, 27 December 1944 - 2 January 1945[140]

MAP 3: Movement of Third U.S. Army Troops, Bastogne-ST Vith Campaign, 22 December 1944 - 29 January 1945[141]

MAP 4: Korean Pennisula 1950 - 1953[142]


HE SOUTHERN SHOULDER
22-26 December 1944
ARDENNES COUNTEROFFENSIVE
16-26 December 1944
OBJECTIVE SIXTH PZ ARMY
OBJECTIVE FIFTH PZ ARMY
OBJECTIVE SEVENTH ARMY
BRUSSELS
ANTWERP
BELGIUM
FRANCE
BASTOGNE
FUEHRER
ARLON
LUXEMBOURG
GERMANY
(TF ALANIS)
(TF ODEN)
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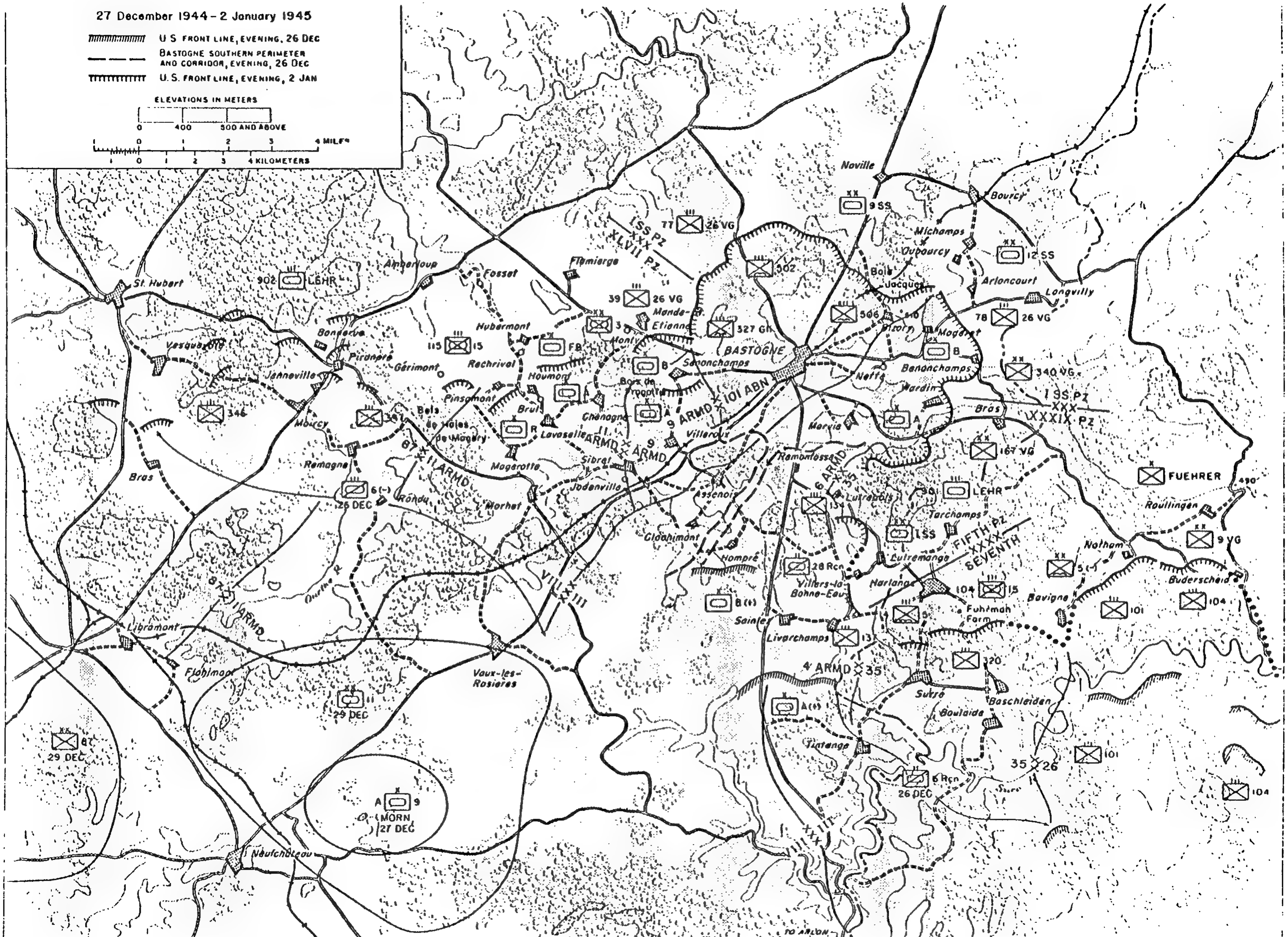
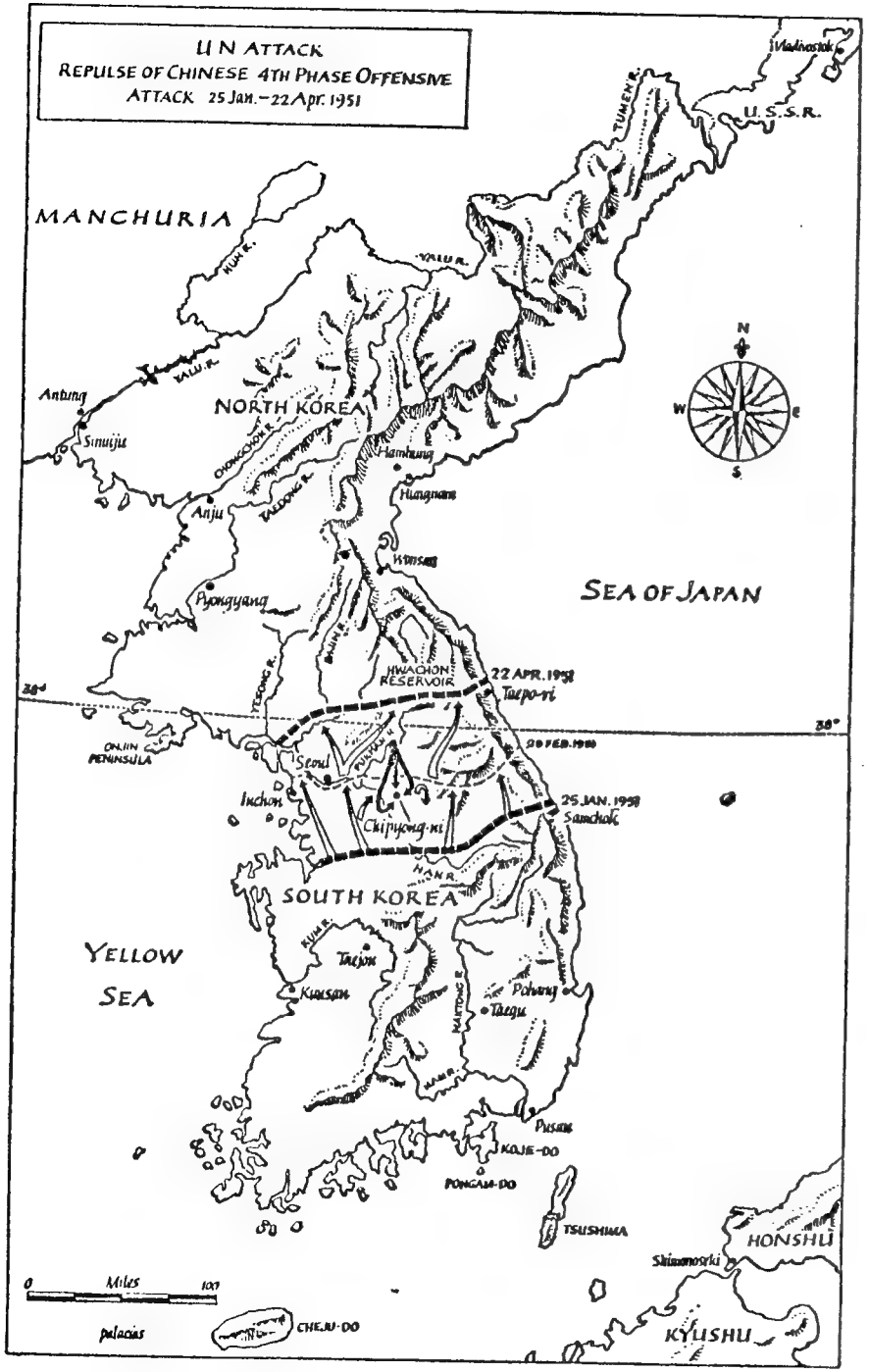

27 December 1944 - 2 January 1945
U S FRONT LINE, EVENING, 26 DEC
BASTOGNE SOUTHERN PERIMETER AND CORRIDOR, EVENING, 26 DEC
U.S. FRONT LINE, EVENING, 2 JAN
ELEVATIONS IN METERS
0
400
500 AND ABOVE
4 MILES
4 KILOMETERS
BASTOGNE
Naville
Bourcy
Michamps
Oubourcy
Arloncourt
Longvilly
Bois Jacques
Mageret
Benonchamps
Neffe
Wardin
Marvie
Bras
Villeroux
Senonchamps
Mande-St. Etienne
Flamierge
Fosset
Amberloup
St. Hubert
Hubermont
Rechrival
Gérimont
Pinsamont
Houmont
Brul
Chenogne
Lavaselle
Sibret
Magerotte
Morhet
Jodenville
Remagne
Moircy
Jenneville
Pironpré
Vesqueville
Libramont
Flohimont
Vaux-les-Rosieres
Neufchateau
Clochimont
Hompré
Assenois
Remonfosse
Lutrebois
Lutremange
Harlange
Villers-la-Bonne-Eau
Sainlez
Livarchamps
Sure
Boulaide
Baschleiden
Tintange
Tarchamps
Bavigne
Notham
Roullingen
Buderscheid
Fuhrman Farm
TO ARLON
1 SS PZ
XLVII PZ
XXXIX PZ
FIFTH PZ
SEVENTH
VIII
III
101 ABN
9 ARMD
6 ARMD
4 ARMD
11 ARMD
87
35
26
FUEHRER
LEHR
9 SS
12 SS
26 VG
340 VG
167 VG
9 VG
5
104
101
15
320
13
134
28 Rcn
6 Rcn
1 SS
902
346
115
39
77
502
506
327 GI
FB
26 DEC
29 DEC
MORN 27 DEC


N
Stavelot
St Vith
SCHNEE EIFEL
Houffalize
St. Hubert
Bastogne
Neuerburg
Bitburg
Wiltz
Diekirch
Echternach
Neufchateau
Ettelbruck
Trier
Florenville
Arlon
Luxembourg
Virton
Longwy
Esch
TO XII CORPS 14 JANUARY
Thionville
Metz
MOVEMENT
OF
THIRD US ARMY TROOPS
BASTOGNE - ST. VITH CAMPAIGN
BATTLE LINE ON
22 DEC 1944
1 JAN 1945
31 JAN 1945
THIRD MAIN
(AT NANCY)


UN ATTACK
REPULSE OF CHINESE 4TH PHASE OFFENSIVE
ATTACK 25 Jan.–22 Apr. 1951
MANCHURIA
NORTH KOREA
SEA OF JAPAN
YELLOW SEA
SOUTH KOREA
U.S.S.R.
Vladivostok
TUMEN R.
YALU R.
Antung
Sinuiju
Anju
Hamhung
Hungnam
Wonsan
Pyongyang
CHONGCHON R.
TAEDONG R.
TAEDONG R.
YESONG R.
HWACHON RESERVOIR
22 APR. 1951
Taepo-ri
38°
ONJIN PENINSULA
29 FEB. 1951
Seoul
Inchon
Chipyong-ni
25 JAN. 1951
Samchok
HAN R.
KUM R.
Taejon
Kunsan
Pohang
Taegu
NAKTONG R.
Pusan
KOJE-DO
PONGAM-DO
TSUSHIMA
HONSHU
Shimonoseki
KYUSHU
CHEJU-DO
0 Miles 100
palacios
N
S
E
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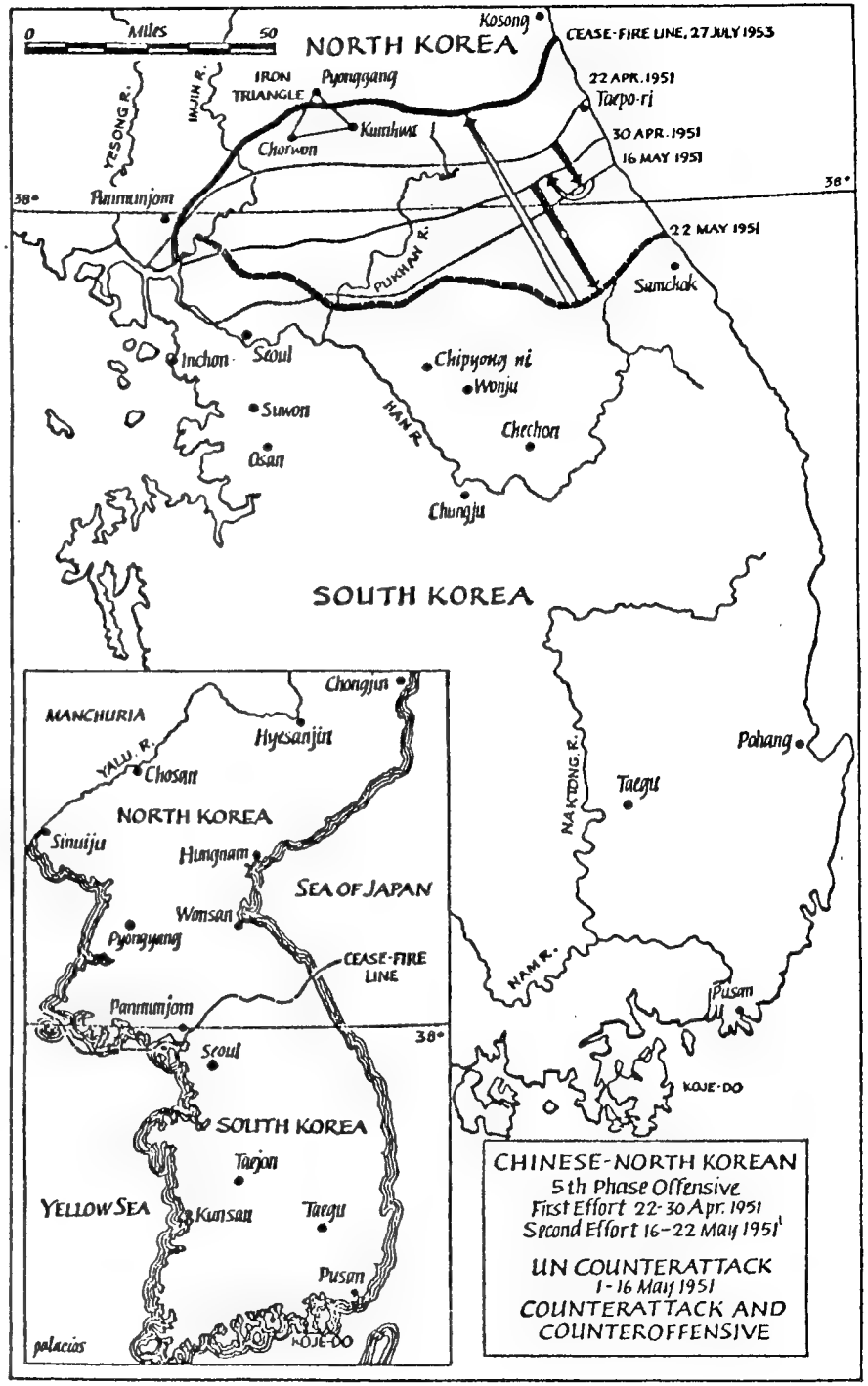
0 Miles 50
NORTH KOREA
Kosong
CEASE-FIRE LINE, 27 JULY 1953
IRON TRIANGLE
Pyonggang
Kumhwa
Chorwon
22 APR. 1951
Taepo-ri
30 APR. 1951
16 MAY 1951
YESONG R.
IMJIN R.
38°
Panmunjom
PUKHAN R.
22 MAY 1951
Samchok
Inchon
Seoul
Suwon
Osan
Chipyong ni
Wonju
Chechon
HAN R.
Chungju
SOUTH KOREA
Chongjin
MANCHURIA
Hyesanjin
YALU R.
Chosan
NORTH KOREA
Sinuiju
Hungnam
SEA OF JAPAN
Wonsan
Pyongyang
CEASE-FIRE LINE
Panmunjom
38°
Seoul
SOUTH KOREA
Taejon
YELLOW SEA
Kunsan
Taegu
Pusan
KOJE-DO
palacios
Pohang
Taegu
NAKTONG R.
NAM R.
Pusan
KOJE-DO
CHINESE-NORTH KOREAN
5th Phase Offensive
First Effort 22-30 Apr. 1951
Second Effort 16-22 May 1951
UN COUNTERATTACK
1-16 May 1951
COUNTERATTACK AND
COUNTEROFFENSIVE

ENDNOTES

1. U.S. Army, FM 100-5, Operations, (Washington, DC: Department of the Army, 1993), 1-1 to 1-3.

2. FM 100-5, Operations (1993), 2-8.

3. FM 100-5, Operations (1993), 2-15. A further more in depth discussion of battle command can be found in Appendix 1 of this monograph, taken from the 1993 version of FM 100-5.

4. Developed from discussions on battle command found in FM 100-5, Operations (1993), 2-14 to 2-15 and senior leader vision in FM 22-103, Leadership and Command at Senior Levels, (Washington, DC: Department of the Army, 1987), 4-5.

5. U.S. Marine Corps manuals discussing command and the operational level of war include: FMFM 1: Warfighting (1989) and FMFM 1-1: Campaigning, (Washington, DC: U.S. Marine Corps, 1990). These documents represent Marine doctrine which is focused on "maneuver warfare", a similar concept to "airland battle". The characteristics and requirements of the commander are similar to FM 100-5, Operations, (1993).

6. Sean O'Keefe, Frank B. Kelso II, and C.E. Mundy, Jr., From The Sea: Preparing the Naval Service for the 21st Century, (September 1992), 1-12.

7. U.S. Navy, Naval Doctrine Publication (NDP) 1, Naval Warfare, (Washington, DC: Department of the Navy, 1994), iii.

8. From The Sea, i.

9. This discussion developed from several sources including From the Sea, NDP 1, Naval Warfare, and discussions with CAPT Thom Ford, USN the Naval Element Commander at the U.S. Army Command and General Staff College, and class discussions concerning naval operations. Besides NDP 1, the Navy will publish several other manuals including NDP 3 on Navy operations and one on leadership and warfighting.

10. U.S. Air Force, Air Force Manual 1-1, Basic Aerospace Doctrine of the United States Air Force, Volume I and II, (Washington, DC: Department of the Air Force, 1992).

11. Articles include: "Breaching Operations: Implications for Battle Command and Battle Space", by Lon E. Maggert and Gregory Fontenot in Military Review, February 1994: 19-35; the inaugural issue of JFQ (Joint Forces Quarterly), Summer 1993; the November 1993 through January 1994 issues of Military Review, which contained a series of articles on FM 100-5; Army February 1994 contains a series of articles on "Winning the Information War"; John E. Grady, "Building Force XXI: The Army's Special Task Force on Digitization", Army, March 1994: 19; Army May 1994 contains a whole series on "Force XXI" including General Gordon R. Sullivan, "Force XXI-'A Force For A New Century'", Army May 1994: 25-34.

12. Department of Defense, Joint Publication 3-0. Doctrine for Joint Operations, (Washington, DC: Department of Defense, September 1993), II-3 to II-27 and III-7 to III-14.

13. Department of Defense, Joint Publication 1-02, Department of Defense Dictionary of Military and Associated Terms, (Washington, DC: Department of Defense, 1989), 77.

14. Joint Publication 1-02., 264. This definition focuses on the operational level of war and therefore, the citation within the monograph is a synthesis of the operational level of war and command.

15. James J. Schneider, "The Loose Marble--and the Origins of Operational Art", Parameters VOL XIX, March 1989, 88-89. Doctor James J. Schneider, Professor of Theory at the School of Advanced Military Studies, provides a view concerning operational art by tracing its development from the late eighteenth century through the American Civil War. He contends that for operational art to exist, several characteristics must be present including: field armies or durable formations; distributed campaigns, logistics, maneuver; joint operations; and an operational vision as an element of operational command.

16. James J. Schneider, "The Loose Marble--and the Origins of Operational Art", Parameters VOL XIX, March 1989, 85-90.

17. Martin Van Creveld, Command In War, (Cambridge, MA: Oxford University Press, 1985), 75. Martin Van Creveld, a twentieth-century historian, provides a theoretical foundation for battle command and how it must be exercised continuously for an army to be successful. He has never served in the military, but has observed modern warfare in the Middle East, Vietnam, and Afghanistan. He studied at the London School of Economics and as a Fellow of War Studies at Kings College, Cambridge. During 1991-1992 he taught and lectured at the U.S. Marine Corps Command and Staff College. Command In War outlines the development in command from ancient Greece through the Arab-Israeli conflicts. It treats from a historical perspective the problems involved in commanding armies, staff organizations, staff interaction and administration, communications methods and technologies, weapons effects, and the importance of logistics. Further, Van Creveld addresses the impact these items have on strategic aims and operational art.

18. Van Creveld, 102.

19. Schneider, 88-99.

20. Schneider, 98.

21. Schneider, 98.

22. Thucydides, History of The Peloponnesian War, translated by Rex Warner, (New York: Penquin Books, 1972).

23. Caesar, C. Julius, The Gallic War, (London: 1946) and The Conquest of Gaul.

24. Ulysses S. Grant, Personal Memoirs of U.S. Grant, Selected Letters 1839-1865, (New York: Library of America, 1990).

25. Sun Tzu, The Art of War, Translated by Samuel B. Griffith, (New York: Oxford University Press, 1971). Sun Tzu wrote his series of essays during the fourth century B.C. His purpose was to develop guide for rulers and generals in the successful prosecution of war. He felt that a skillful strategist should be able to defeat an enemy without engaging it, to capture cities without laying seige to them, and to overthrow a state without going to war. Sun Tzu also realized that war was more than just numbers of men. Generals would have to understand a great deal to be effective. He considered moral, intellectual, and situational events more important than the physical collision of men. Generals would have to synchronize diplomatic, military, and economic means to bring about the defeat of an enemy. He was convinced careful planning, accurate information, and a clear comprehension of the affects of terrain and weather would contribute to a swift defeat for the enemy. Part of his concern for synchronization involved the decisive influence of supply, both on the economy at home, and on operations in the field. Among other factors relevant to this monograph, he discussed the moral, emotional, and intellectual qualities of good commander.

26. Sun Tzu, The Art of War, Translated by Samuel B. Griffith, (New York: Oxford University Press, 1971), 39.

27. From Sun Tzu's discussion of generalship and leadership on pages: 43, 63, 66, 84, 87, and 95.

28. Carl von Clausewitz, the son of a Prussian lieutenant, entered the Prussian Army at the age of 12 in 1780. He encountered war for the first time during the War of the First Coalition, 1793-1795. The war with its chaos, bloodshed, and inconclusive outcome made a lasting impression on Clausewitz. He saw war as an element of political policy. Furthermore, he concluded that war could not be mastered by observing here or there nor by having a given set of rules which must be obeyed. By 1801, Clausewitz entered the new War College in Berlin started by Scharnhorst, graduating at the head of his class in 1803. In 1806 he participated in the Jena campaign, being captured by the French. After internment, he went to Switzerland and then to serve until 1812 as an aide to Scharnhorst. In 1812, Clausewitz resigned his commission in protest over the alliance between Prussia and France. He joined the Russian Army serving with the rear guard in front of Moscow and later in the pursuit of Napoleon. He served as a liaison officer and Corps Chief of Staff during 1813-1814. In 1815, Clausewitz rejoined the Prussian Army. During the Waterloo campaign he served as chief of staff of one of the four corps making up the Prussian field army. Most of his writing occurred after that during his service in an administrative position in Berlin from 1818 to 1830. These writings resulted in On War essentially as we know it being completed in 1827. Some revisions were completed or planned, but he revised only several chapters before dying of a heart attack in 1831. On War provides insight into the strategic and operational level of war, as well as the moral, physical, and leadership demands of war. Any translation of the genius that was Clausewitz must also consider his writings on education, politics, art, and letters written to various acquaintances. Several analyses include H. Rothfels' Carl von Clausewitz: Politics and War and E. Kessel's introduction to Carl von Clausewitz, Strategy of the Year 1804. Also Peter Paret's "The Genesis of On War, in On War, 3-25 and Michael Howard "The Influence of Clausewitz" in On War, 27-44.

Baron Antoine Henri Jomini was born in French Switzerland in 1779. He worked as a young man in a banking business in Paris. He decided to join the Grand Armee and Napoleon after the resounding victories of the new champion of French arms. He was ambitious, curious, and an intellectual ability considered one of the most penetrating of the age. By 1806, Jomini was a 27 year old colonel and a member of Napoleon's staff. In 1813 Jomini was appointed as chief of staff to Marshal Ney, with the rank of "General of the Brigade" Due to conflicts with Napoleon's Chief of the Imperial Staff, Jomini accepted a similar position in the Russian Army in 1814. He would later found the Nicholas Military Academy in Moscow in 1832. The leaders of the great powers considered him a military consultant with his advice considered on many military operations. His work Summary of the Art of War was a textbook for both Union and Confederate generals during the American Civil War. He died in 1869. He had written extensively on the movements of formations in battle, on the value of maintaining the initiative, and commanders providing guidance and leadership in the "drama of war". Further, he considered supply an important matter for commanders and a subject which must be understood for a general to be successful. Jomini wrote concerning definite staff duties as well as the relationship between commander and staff. The staff existed to assist the commander in executing the requirements of command, while allowing him to focus on the critical issues of command. Moreover, he emphasized the need for the commander to have a keen intellect to handle the intellectual requirements of the campaign. Further, he understood the human element of war and that control of the human element in war depended directly upon the leadership qualities of the commander. The end result was Jomini providing us the initial primer on modern warfare.

29. Carl von Clausewitz, On War, edited and translated by Michael Howard and Peter Paret, (Princeton, NJ: Princeton University Press, 1984), 100-101.

30. Clausewitz, 104.

31. Clausewitz, synthesis of discussion on "inner eye", determination and character from pages 102, 104.

32. Antoine Henri Jomini, Art of War, edited by BG(RET) J.D. Hittle in Roots of Strategy, Book 2, (Harrisburg, PA: Stackpole Books, 1987), 455-456.

33. Clausewitz, 101, 107-108, 112, and 192.

34. Sun Tzu, 95, 112-115.

35. Sun Tzu, synthesized from pages 84 ("know enemy and yourself", impact of terrain), 95 (potential), 129.

36. This discussion is developed from FM 100-5, Operations, 6-12 and Brigadier General Maggert's article in Military Review concerning battle command and battle space, "Breaching Operations: Implications for Battle Command and Battle Space" Military Review, (February 1994): 19-35.

37. FM 100-5, Operations (1993), 6-12. Further discussion on battle space occurs in Appendix 1.

38. Quoted from the Battle Command Training Program seminar handouts on Battle Command, SAMS Seminar 11-15 April 1994.

39. Clausewitz, 119-121. Friction, according to Clausewitz, is the force that makes the apparently easy difficult. Further, it is difficult for theory to even define.

40. Clausewitz, 186.

41. Clausewitz, 192-193.

42. Sun Tzu, 43, 87. Clausewitz, 101-102 and the realm of uncertainty.

43. Clausewitz, 117-118, 178.

44. Jomini, 456-457.

45. FM 100-5, 2-15 and FM 101-5 Command and Control For Commanders and Staffs, (Washington, DC: Department of the Army, 1993), iii to 1-6.

46. Discussion of intuition taken from Battle Command Training Program seminar packet on Battle Command, from the SAMS Seminar, 11-15 April 1994.

47. FM 101-5, 1-7 to 1-12.

48. FM 100-5, 2-15.

49. FM 100-5, 6-7.

50. Clausewitz, 103-106.

51. FM 100-5, 6-6.

52. Joint Publication 3-0, Doctrine for Joint Operations, III-7, 14.

53. Clausewitz, 101-102. A modern view of the role of the commander and the estimate was presented by GEN (R) Richard Cavazos, Senior Observer, Battle Command Training Program, during the SAMS Seminar, 11-15 April 1994.

54. FM 101-5, 1-15, C-2.

55. John Schlott, Operational Vision: The Way Means Reach The End, (Fort Leavenworth, KS: School of Advanced Military Studies, 1992), 15.

56. Van Creveld, 200-202 and Schlott, 16.

57. This historical example is derived from the author's reading on the campaign of Vicksburg and the Vicksburg staff ride conducted by the Combat Studies Institute (CSI) and the School of Advanced Military Studies (SAMS). Works on the campaign include: U.S. Grant: Memoirs and Selected Letters, Memoirs of William Tecumseh Sherman, Partners In Command by Joseph T. Glatthaar, and Sherman: A Soldier's Passion For Order by John F. Marszalek.

58. Van Creveld, 1-5.

59. Van Creveld, 5-8, 11, 230-231.

60. Van Creveld, 192-193, 231.

61. Van Creveld, 189-231. This entire chapter is devoted to the Israeli command structure and its contribution to success by the IDF in the June 1967 war against Egypt (Sinai campaign).

62. U.S. Army, FM 100-5, Filed Service Regulations: Operations, (Washington, DC: Department of the Army, 1941), 18.

63. FM 100-5 (1941), 24.

64. FM 100-5 (1941), 25-26.

65. FM 100-5 (1941), 26.

66. FM 100-5 (1941), 26-27.

67. U.S. Army, FM 100-5, Field Service Regulations: Operations, (Washington, DC: Department of the Army, 1949), 19.

68. FM 100-5, (1949), 17-18. Interestingly, this manual was published in August, the month the Soviet Union exploded its first nuclear device.

69. FM 100-5 (1949), 18. Quote from page 19. This was an obvious reference to the massive numbers of Soviet troops in Europe, the Army's primary adversary and focus.

70. FM 100-5 (1949), 19-20.

71. Joint and combined doctrine as well as U.S. Army doctrine emphasizes these attributes. Joint Publication 3-0. Doctrine for Joint Operations, FM 100-5 (1993) Operations, TRADOC PAM 11-9, Blueprint of the Battlefield.

72. Robert W. RisCassi, "Principles for Coalition Warfare", JFQ, Summer 1993, 60-61. Also, FM 100-5 pages 1-1 to 1-3 and Joint Pub 3-0 pages II-3 to III-7.

73. RisCassi, 60. Also FM 100-5 and Joint Pub 3-0, same pages.

74. RisCassi, 61. Also FM 100-5 and Joint Pub 3-0, same pages.

75. RisCassi, 62. Also from FM 100-5, 1-1 to 1-3 and 2-14.

76. FM 100-5 (1993), 2-9.

77. U.S. Army, FM 22-103, Leadership and Command at Senior Levels, (Washington, DC: Department of the Army, 1987), 7-9.

78. US Army, Field Manual 101-5, Command and Control For Commanders and Staff, (Fort Leavenworth, KS: U.S. Army Command and General Staff College, 1993), i. The discussion of battle command occurs from 1-4 to 1-24. estimates are addressed on 3-85; Chapter 4, Section I; and Appendix C, Estimates. The commander's estimate is covered on C-14 to C-26.

79. The procedures in FM 101-5 are correct, but are not clear as to the pivotal role of the commander. If, as the manual outlines, the commander conducts his estimate based on the staff estimates and his own knowledge, a key element is missing. The commander should conduct his own estimate as a "mirror" to the staff. If he participates with the staff, the staff may slant their information to suit the commander. If he is totally out of the process, then the staff may have no idea what is realistic. The commander should do his own intelligence, operations, and support estimate with the staff estimates as support or a sanity check. When the commander makes his COA decision, he does so based on his own study of the mission and the staffs. This deliberate process will probably occur prior to combat. Once engaged, the commander will abbreviate the process or conduct quick, information sessions/situation updates and make a decision based upon his own estimate of overall circumstances. Finally, we cannot loose sight of the fact the commander is key to the entire process.

80. TRADOC Pam 11-9, pages 6, 13-14, and 20.

81. This discussion has developed from the author's experience in the CGSC Class of 1993 and interviews with members of the staff and faculty of the Command and General Staff College. The method of instruction now changed in the fall of 1993 under the direction of BG Randolph House, Deputy Commandant, U.S. Army Command and General Staff School. No formal directive was published, but beginning in the November-December instruction period, students began to serve as commanders. They received guidance and coaching on questions to ask and how to approach the instruction. Whether this will be successful or even continue, remains to be seen. Author also interviewed LTC John Burdan, Center for Army Tactics concerning this subject and the elective on Battle command, 21 April 1994.

82. Discussion of War College level of instruction developed from COL Steve Baribeau, Concepts Development Directorate, CGSC and BG Randolph House, Deputy Commandant, CGSS. The War Colleges (Army and National) do not address operational battle command. The primary focus is on strategy development, national policy and government, and training strategists. The education for battle command comes from self study and the Battle Command Training Program (BCTP) at corps level.

83. Ibid, the author also attended the Battle Command elective taught by the Center for Army Tactics, U.S. Army Command and General Staff College. The instructor on 26 April was BG Randolph House. General House instituted several changes in CGSC beginning in August 1993. Students began serving as commanders during staff exercises and the Tactical Battle Command-A317 elective was started.

84. Leader Development Chain figure taken from class handouts for CGSC elective A317 "Tactical Battle Command".

85. Information derived from discussions with LTC Gephart, Tactical Commander's Development Course (TCDC), U.S. Army Command and General Staff School; BG Randolph House, Assistant Commandant, U.S. Army Command and General Staff School; and class discussions during seminar meetings, School of Advanced Military Studies, 1993-94.

86. Patton quote taken from slides used in A317, Tactical Battle Command elective in CGSC.

87. This discussion was synthesized from readings on Battle Command and during conversations with COL Baribeau and BG House. We train tactics in the institutional education system. Leader development occurs through operational assignments and unit training. The Army does not synthesize them well into battle command. FM 100-5 provides the only clear discussion of battle command. BG House indicated that the training of operational battle command occurs during corps BCTP rotations, involving joint and in some cases combined operations. These occur normally once during a corps commander's tenure. It would seem some joint training above this level is required on the BCTP model.

88. Ladislas Fargo, Patton: Ordeal and Triumph, (New York: Dell Publishing, 1963), 683.

89. Martin Blumenson and James L. Stokesbury, Masters of the Art of Command, (Boston: Houghton Mifflin Company, 1975), 231.

90. George S. Patton, War As I Knew It, (Boston: Houghton-Mifflin Co., 1947), Introduction.

91. Koch, 53. Blumenson and Stokesbury observed that when Patton entered the campaign on 1 August, operations broke open. This is a bit of a stretch, Operation Cobra had been on going for several days. However, the exploitation and pursuit was of Patton's making, as was the defeat of the two German armies in Normandy. Chapter on "Masters of Mobile Warfare", page 237.

92. Patton, 149.

93. Patton, 149.

94. Fargo, 667.

95. Charles B. MacDonald, A Time For Trumpets: The Untold Story of the Battle of the Bulge , (New York: Morrow and Company, 1985), 514-515.

96. Fargo, 684.

97. Martin Blumenson, The Patton Papers, VOL II, 1940-1945, (Boston: Houghton-Mifflin Co., 1974), 613.

98. Patton, 153.

99. Koch covers this as does Fargo, 665. Also in Weigley's Eisenhower's Lieutenants, 497-498, "Patton's military intuition was as acute as any in the American Army."

100. Third United States Army, "After Action Report, August 1944-March 1945, Volume II, Staff Reports", 23-27.

101. Robert S. Allen, Lucky Forward, (New York: MacFadden-Bartell Corp., 1947), 149-153.

102. Allen, 153.

103. Allen, 678.

104. Clay Blair, A General's Life, (New York: Simon and Schuster, 1983), 367. Superb discussion of Battle of the Bulge and Patton, 361-392. Also discusses relief of Bastogne and objective of 12th Army Group: maximum destruction of salient. Patton definitely focused on the objective..

105. Blair, 184.

106. Fargo, 652-653.

107. Blumenson, 593.

108. Oscar W. Koch, G2: Intelligence for Patton, (Philadelphia, PA: Whitmore Publishing, 1971), 26. Also from Fargo, "On 20 December Patton with only his driver visited two corps and five division commanders, reshuffled two divisions, and called for engineers, Tds, and extra tanks. He and Mims his driver had single-handedly performed the work of an entire staff." page 683.

109. Directed telescope concept from Van Creveld; 75, 115, 142, 147, 176, 255-257.

110. Koch, 106.

111. Fargo, 691. Also included in discussion by General Patton in War As I Knew It, 155.

112. Schlott, 30.

113. Edgar F. Puryear Jr. 19 STARS: A Study in Military Character and Leadership, (Novato, CA: Presidio Press, 1971), 286.

114. Matthew B. Ridgway, The Korean War page 79 and Soldier: The Memoirs of Matthew B. Ridgway.

115. James F. Schnabel, Policy and Direction: The First Year, (Washington, DC: Office of the Chief of Military History, United States Army, 1988), 306.

116. James F. Schnabel, "Ridgway In Korea", BCTP Professional Reading, Fort Leavenworth, KS: Combined Arms Training Activity, 1989), 2-12. General Ridgway believed he had four critical leadership tasks: be where the crises of action is going to happen; be physically fit; restore the fighting spirit of your men; and be lucky.

117. Clay Blair, The Forgotten War, (New York: Doubleday, 1987), 559.

118. Schnabel, 326.

119. Schnabel, 349-350.

120. The Communist forces already enjoyed a sanctuary in Communist China from any type of offensive action. Further, President Truman believed later that Ridgway's actions which focused on "bleeding the Chinese" may have set the stage for negotiations. Schnabel has a good discussion of this on 349-351.

121. Joseph C. Goulden, KOREA: The Untold Story of the War, (New York: Times Books, 1982), 436.

122. Blair, The Forgotten War, 571-587.

123. Ridgway in his travels was known to help soldiers in different ways. He had taken the habit of carrying extra gloves and mittens with him during WWII to give to soldiers who had lost theirs. This practice was invaluable in the cold, harsh Korean winter. During one stop, Ridgway slid down a hill and tied the bootlace of a heavily burdened Marine. Moreover, besides travelling to the front, Ridgway moved about in an uncovered jeep. The concept of shared hardship and caring for soldiers was deeply ingrained in him. Taken from The Korean War by Ridgway.

124. Schnabel, Policy and Direction: The First Year, 307-308.

125. Schnabel, 327.

126. John Toland, In Mortal Combat: Korea, 1950-1953, (New York: Morrow and Company, 1991), 406.

127. Toland, In Mortal Combat, 380.

128. Goulden, 441.

129. Central Headquarters, UN Command Far East Command, Command Report January 1951, (GHQ, FEC: Military History Section, June 1951), 11. Also highlighted in Schnabel, pages 308-309: "Inflicting maximum punishment and delaying in successive positions while maintaining its major forces intact."

130. Central Headquarters, UN Command Far East Command, Command Report February 1951, (GHQ, FEC: Military History Section, July 1951), 1.

131. Schnabel, 12.

132. Central Headquarters, UN Command Far East Command, Command Report March 1951, (GHQ, FEC: Military History Section, August 1951), 6.

133. Central Headquarters, UN Command Far East Command, Command Report, March 1951. Military History Section, GHQ, FEC, dated August 1951, 6.

134. Schnabel, 6-8. For two more years EUSA battled the communists and never again did it retreat as an army. Though outnumbered, it was never outfought. It inflicted severe casualties on the enemy while absorbing some of the most vicious human wave attacks in the history of warfare.

135. Schnabel, 363-379.

136. FM 101-5, C-14.

137. This entire discussion of Battle Command was distilled from FM 100-5 (1993), 2-14 to 2-15. The purpose is not to repeat sections of this monograph, but to provide a synopsis of current U.S. Army doctrine which forms the foundation and purpose of this paper.

138. This entire discussion on battle space was derived from FM 100-5 (1993), 6-12 to 6-13. Battle space represents the medium in which the operational commander exercises Battle Command.

139. Cole, The Ardennes: Battle of the Bulge, Map IX.

140. Cole, The Ardennes: Battle of the Bulge, Map X.

141. Patton, 154.

142. Ridgway, The Korean War, 136-137.

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